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STATEMENT

RELATIVE TO THE

EDUCATIONAL SYSTEM

OF

KNOX'S COLLEGE, TORONTO;

WITH

SUGGESTIONS FOR ITS EXTENSION AND IMPROVEMENT,

BY THE

REV. H. ESSON,
PROFESSOR OF MENTAL AND MORAL PHILOSOPHY.

TORONTO:

PRINTED BY J. CLELAND, KING STREET,

1848.

EDUCATIONAL SYSTEM

OF

KNOX'S COLLEGE.

A printed letter of Dr. Burns, suggesting certain measures which appear to him essential to the best interests of Knox's College, having been addressed to me, just at the time I was engaged, in preparing the classes, under my care, for the usual examinations, at the close of the Session, it was not in my power to submit my views, in reference to the suggestions which that letter contains, and the very extensive changes, in our Educational system, which it recommends, before the meeting of the College Committee. Indeed, without premising a general view of that system, it is not possible to form a just and enlightened estimate of the projected changes, and of the nature and extent of the influence which the adoption of them would necessarily produce, upon an institution, of which the efficiency has been hitherto unequivocally demonstrated, by the results of its working, and, as I now hope to evince, just in consequence of the general soundness of the method of instruction pursued, and its judicious adaptation to the peculiar circumstances of those who have been the subjects of instruction and discipline. A clear and comprehensive view of the educational course, as it is now conducted in Knox's College, in respect both to the subject matter and to the principles and method, in connexion with the history of the institution, in its rise, progress, and the gradual expansion and amelioration both of its plan and working, are, in my judgment necessary, first of all to be brought under review, before any change involving a departure from the very principles, to which our adherence in time past, it appears to me, has been the main cause of any measure of success with which God has been pleased to crown our work,—principles

which, if I do not greatly deceive myself, all enlightened education-
 alists will hold with me, to be vital, fundamental, and essential to the
 right constitution of every seminary of learning, secular or sacred.

As Dr. Burns' strictures, on the educational course of Knox's
 College, have an almost exclusive bearing upon the department of
 instruction with which I have been intrusted, it will not be deemed
 either obtrusive or presumptuous, on my part, if I now take leave
 to subject to free and unreserved, but, I hope, candid and dispa-
 sionate criticism, the Doctor's scheme of philosophical training and
 the principles on which his views of both the theory and the practice
 of education—at once the noblest and most profound of all the arts—
 are based.

But—while I enter my protest, not merely against the projected
 reforms, which it is the special subject and design of the Doctor's
 letter, to forward, but against the very principles, on which he
 grounds his advocacy of them, which, if I do not wholly misappre-
 hend his statement, are directly opposed, in every respect, to what I
 have always held to be fundamental and essential laws and canons of
 all sound and scientific education,—I have great pleasure in acknow-
 ledging the courteous and altogether unexceptionable spirit, in which
 the Doctor has been pleased to convey his strictures and suggestions.
 I rejoice, at the same time, that an opportunity is hereby afforded me,
 before the meeting of our Synod, in June next, of submitting to the
 Church and to the public, at large, a statement of facts, connected
 with the past and present state of our now flourishing College and
 more especially with the various important departments, with which
 I have been charged, as may enable all its enlightened friends to judge
 for themselves, in regard to the matters in controversy, as well as put
 before the Synod that information which may help to conduct their
 deliberations to a right decision. I shall be careful to accompany
 the whole statement and discussion with a constant reference and
 appeal to the authority of those eminent masters, for whose wisdom
 I am glad to find that Dr. Burns entertains as high a veneration as
 I do myself—such as Reid, Stewart, and Beattie. I shall reserve
 for the appendix such remarks on the Doctor's letter, as may not
 have been anticipated in the body of the statement, that the nature
 and amount of my objections to his scheme may thus be more
 fully unfolded, and more easily comprehended and appreciated,
 after a general exposition of the existing course of study and an
 historical review of our educational career, from its commencement,

I shall endeavour, in the prosecution of my design, first of all, to ascertain what are the leading and essential departments, in the order of their relative importance, for which, in the constitution of a Theological School, it should be our chief care to make effectual provision, so as to be able to give a complete theological training, keeping steadily in view, in this inquiry, what is practicable, within the compass of the means which we have any prospect of being able to command for securing the effective conduct of those departments, with masters at the head of each, whose talents and reputation, as well as piety and zeal, will be found the only guarantee for the permanence and prosperity of our Institution. This will give us a view of what, first of all, is practicable and attainable, in the present circumstances of our Church—and will indicate to us the successive steps, by which we should proceed, in the wise economy of our limited means, and the judicious application of them, to provide for such new Chairs or Professorships in the due order of their necessity and importance as the wisdom of the Church shall deem necessary to perfect the design of the Institution.

The second topic,—to which the attention of the Synod will necessarily be directed, and which demands the exercise of their best wisdom, as, upon the issue of their deliberations, in this instance, the vital interests of our College mainly depend—will be, the proper constitution of the whole course of instruction and discipline, determining the selection and disposition of the branches to be taught, the successive order in which they shall be arranged and combined into one system of scientific education, and the principles and method of conducting the work, so as to render the means and agencies at our disposal most effective for the end contemplated. And here, let it be observed, that the *principles and method* are more important than even the *subject matter* of our teaching.

In conclusion, I mean to present to the Synod a brief historical review of our College, from its commencement to the present day, recording as I proceed, the circumstances which have, for good or evil, affected either its plan or working, in the several stages through which it has passed since 1844. I shall throw into the appendix some documents which will serve to illustrate or confirm my statements and the opinions or strictures which I may have occasion to bring out, in the body of that statement.

With a view, then, to ascertain, first of all, what are the leading and essential departments, in the order of their relative importance,

for which provision should be made, in our Theological Institute, we must previously determine what is the great end of the Gospel ministry, and what consequently the special qualifications of those who are admitted to undertake its solemn responsibilities. As the great end of the Gospel ministry is to contend earnestly for the Faith once delivered to the Saints, to bear witness to the Truth, of which the Church of the living God is the Pillar and Ground, maintaining its scriptural soundness, integrity, and uncorruptedness, the first and most indispensable preparation for the work of the Lork,—next to the anointing of the spirit,—the actual conversion of the soul,—and the inward call to the ministry,—is, without all question, that kind and measure of knowledge, learning and science, which may fit its subject for the right understanding and faithful interpretation of the original and authentic text of scripture, the only genuine exponent of the mind of the spirit, the only perfect transcript of the divine will, and therefore the only infallible standard of Faith and Manners.—But the Scriptures in the original languages, Hebrew, Greek, and perhaps I might add Chaldaic, and Syriac, are the alone original, authentic and divinely authoritative depositary of the will of God for man's salvation. A *competent*, if I may not be warranted to say, an *intimate* knowledge of these sacred languages, is the most *essential* of all the *literary* qualifications of the candidate for the Gospel ministry: Next in importance, and scarcely inferior to the two great parent languages, Hebrew and Greek, is the *Latin*, which introduces the student to an acquaintance with the earliest and most authoritative versions of the Bible. It is itself worthy in a manner, to be esteemed one of the *sacred* languages, embodying, as it does, so vast and various a treasure of the wisdom and learning of the Fathers and Lights of the Christian Church, from the earliest ages down to the present times, while it has been employed, *almost universally*, as the common interpreter—grammatical and lexicographical—of the other original languages, and, for many ages, was the only organ of intercourse between learned men, in all parts of the civilized world.

“The Bible, the Bible alone,” I use the words of the ablest champion of Protestantism, Chillingworth, “is the religion of Protestants.” While the general intelligence of the people is daily growing under the propitious influence of diffused knowledge and extended and improved education,—the rapid increase and now

almost universal spread of popular literature and popular reading,—thereby raising in the social and mental scale the humblest classes of the various denominations of Protestants,—shall we suffer those who are called to be the teachers of religion, the interpreters of the Bible, to be ignorant of those languages which are the medium of the communication to man of the divine word and will, or, which is the same thing, in effect, to be but *slightly and superficially instructed* in the primary and paramount elements of theological learning? What advantage has a divine, in our day, destitute of a knowledge of the original text of scripture, over the great body of his *intelligent hearers*, of whom not a few are frequently found, in many of our churches, who, in the extent of their reading and general information and intimate acquaintance with the common version of scripture, are not behind their Pastor himself? The most humble schools of theological learning are now, in most instances, provided with the ablest instructors in this department, and Classical and Patristic, together with Oriental and German Literature, may be justly regarded as the very kind and quality of literature adapted not only to the peculiar exigencies of the christian church, in this age, but the three first as forming *every where, and at all times, the most essential and fundamental* qualifications of a sound and enlightened divine. I contend, therefore, that it should be the very first care of the directors of our theological seminary to enforce and ensure, to the uttermost, the due attainment of qualifications, which are, in the ordinary course of providence, the only sufficient guarantee for the preservation of the truth of God from all corruption, and for its effectual and triumphant defence against the most formidable assaults, to which it is exposed. In stating, at such length, a truth so obvious, and in dwelling upon it, with such emphasis, my object is to impress upon the church the vast importance, I may well add, the immediate necessity of an arrangement which I have long felt to be indispensable to the efficiency and success both of the college and of the academy, and indeed am persuaded that, if it is not early adopted, it will be impossible to extend or even to sustain the present prosperous and promising condition of each of these institutions. It was, on my urgent suggestion, embodied, among the other instructions given to Mr. Bayne, in the important mission with which he was charged by a resolution of our last Synod, that he should be authorised to

select a Professor of Classical Literature, qualified to raise the character of our seminary, in this most essential department, at least to an equality with kindred institutions in this province, and especially in this metropolis, with which it must ultimately be brought into comparison and competition, and, if found wanting, when thus weighed in the balance against them, will, I apprehend, necessarily sink down to an inferior level, and suffer all the consequences of impaired character, in the diminution, if not forfeiture, of public confidence. And, let it be here borne in mind, that if the standard of classical teaching be depressed below the scale of other schools, in our immediate proximity, no diligence or ability of the Professors, in the higher departments of our course, will be able to remedy the injury, that must thence arise, not to that department alone, but to the whole superstructure of our education, which must rest upon this foundation, and in its solidity and extent can never exceed the proportion of the breadth and depth of that foundation. I would, therefore, with all deference, earnestly press this measure upon the immediate attention of the Synod, at its next meeting, believing, as I sincerely do, that the consequence of neglecting or postponing its adoption, will be to arrest the progress of both schools, which must, mainly through the efficiency or inefficiency of their working, in this all important department, stand or fall, flourish or decline, together. I have all along been persuaded that the college can never rise to any eminence, nor take a place among the respectable theological schools of this age,—American or European,—if it be not sustained and fed, so to speak, by a preparatory school, as its nursery, of which classical learning must be the very staple—the grand element. I have been, perhaps, as much conversant with classical teaching, all my life, as most of those who have not made it their sole profession; and I can truly say, that since I have had the honor to be connected with this college, I have done my utmost to give all the efficiency I could to this department. But I feel bound, in all candor and faithfulness, to state that, were I to have nothing else to divide or distract my attention, and were I to devote my nights and days to the study and to the teaching of only the *Greek and Latin classics*, it would require more than two or three years of unintermitting application to enable me to do justice to many of our students, in the advanced stage which they have already attained; and when I take into account their capacity,

zeal and application, I feel warranted to assure the church, that no measure could be devised, at this moment, more propitious and better timed than the appointment of a Professor, sufficiently qualified for this work. While such an appointment would give new life and spirit to our college and raise the tone of education, in both the schools, it would, I am confident, in the same degree, augment the funds and extend the reputation and success of both. If this provision be not made speedily, I foresee that both schools will languish and decline, at least will be arrested; in that hopeful and cheering progress, which they have enjoyed hitherto; since there is no power, that I can see, adequate to sustain them at their present level, much less to elevate them above it. Indeed, when such institutions become stationary, especially in the early stage of their existence, they are prone to decline and sink into obscurity and insignificance. Many young men are now to be found in Scotland, who, with an enthusiastic devotion to classical and polite literature, have enjoyed and improved all the facilities and advantages, which the parent country so abundantly affords for education, in all the departments of learning, ancient or modern, and who want only time to ripen their acquirements and scope to extend and apply them, in order to take a high place, perhaps the highest, as classical scholars and teachers. The respectable position of a Professor in our college, with a salary of £250 or at most £300 a year, would, I conceive, be inducement quite sufficient to procure us one who would be an invaluable treasure.

The very same arguments, resting on the same grounds, apply to the kindred departments of *Oriental and Patristic Literature*, and *Biblical Criticism*, as to *Classical* learning, with this enhancement of their force, that the three first are more immediately and essentially connected with the very end of a theological school, and would still more directly tend to advance its reputation and usefulness, and to draw students from a distance, attracted by the rare and precious advantages of the best instruction in the most essential branches of theological education. I need not insist upon the importance, in the present age, of uniting with oriental and biblical learning a familiar acquaintance with the German language and the theology of Continental Europe; and I see no reason to doubt that, among our young countrymen, now officiating in the humble capacity of teachers or missionaries, in Scotland, we

might find one, who, in the entire devotion of his time and talents to these all important branches of theological learning, would impart credit and lustre to our institution—the only pledge of its permanent and increasing prosperity. It is quite evident that two professorships, one of Hebrew and another of Biblical Criticism, will be required conjointly and permanently, if we hope to have the work of theological education go on prosperously. Indeed, it is barely possible that, with such means as we can command, we should be able to obtain one eminent teacher, uniting so many rare and arduous attainments; and even if we could, the work would be too great for one individual to undertake.

The last and only other chair, that I should desire, as soon as possible, to see established, would be that of a course of Physical Science, or rather Physico-Theological Science, somewhat corresponding in its character and design with the Bridgewater Treatises, directing the mind of the theological student to those general views of the physical and moral worlds, of the whole constitution and course of nature, which constitute the ground work of natural theology; and by illustrating, in the most impressive manner, the providence and perfections of Deity, add new vigor to faith and new fervor to devotion, at the same time, that they prepare him to meet the various subtle forms of reasoning or sophistry which may be employed, on the part of sceptics and infidels, physiological, geological, or astronomical. In conformity then with these principles and views, there appears to be just three additional chairs or professorships wanted, to complete the most liberal provision for the service of Knox's College, so as to render it a comprehensive and efficient school of theological training. Nor, let it be observed, is it necessary to fill them all up at once; nor even, perhaps, in very rapid succession. Say that we begin with the immediate appointment of a Classical Professor; this would certainly give a new impulse to the progressive expansion and advancement of both seminaries at once, and might be expected, by augmenting our number of students, and thereby our means and influence, to facilitate the early accomplishment of the next contemplated improvement or extension of our college, by the instalment of a Professor of Oriental Literature and Biblical Criticism, uniting with these most essential acquirements a thorough knowledge of the German language, literature, philosophy and theology. I believe, that both in

Britain and in the United States, German and continental theology is daily concentrating more and more the attention of divines, and exercising so powerful an influence both for good and evil, that no minister of the gospel can be regarded as sufficiently well educated when this does not form a part of his training. This second consummation being happily attained, we might well wait in prayerful faith and hope another year or two, before we attempt to crown our work by establishing a chair of Physio-Theology, like that occupied by Dr. Fleming, in the Free Church, Edinburgh. There is nothing chimerical or extravagant in anticipating as practicable this gradual extension of our plan; and, let it be remembered, that the best economy, with regard to such an institution as ours, is to give it all the completeness and efficiency, which our means and resources will admit, as it is, on this ground mainly, that we must rely for that continual and growing prosperity which are the natural fruit of public confidence and public patronage.

In order to complete my view of the subject matter of our teaching, it may be well just to indicate or define what I conceive to be the true scope and range of my own proper department—mental and moral philosophy. The science of mind is the centre of all the moral and political sciences, bearing the same relation to them, which grammar does to language, or mathematics to mechanical philosophy. All the sciences and arts which have for their objects *man, society, God*,—such as jurisprudence, politics, literature, criticism, logic, rhetoric, ethics, natural theology, derive from this source their life and nourishment and hold of this as their common head or parent science. This is peculiarly and pre-eminently the science of the divine, the moralist, the educationalist, and all christian ministers are by the nature of their office professors of human education, in the noblest and most comprehensive signification of the term; and as the stream cannot rise higher than the fountain, so their practical skill and efficiency in their work, humanly speaking, cannot but be circumscribed within the same limits, as their knowledge of the organ by which and upon which their art is to be exercised. It is upon the mind, the heart, the soul, that the christian pastor is called to operate, as his proper subject. A knowledge of its constitution and laws, is the only rule to direct him in the great work, of enlightening, reforming, christianising the mind. Nay, the agency of the Divine Spirit in the work of grace and salvation

is conducted, in harmony with the nature of that mind, which the divine inspiration gave, and which it only can renew. To unfold, therefore, the constitution and laws of human nature,—to give an analysis of our sensitive intellectual and moral being, is infinitely the most important department of secular, how much more then of moral and religious education. But not only is the knowledge of the mind and its faculties, of essential and universal importance, as the common key in some measure to all other sciences—itsself the noblest science of all—but it is the shortest, most direct and easy path to the ultimate mastery of all the cognate and derivative sciences, logic, rhetoric, ethics, politics. In laying this foundation well, we at least put the student in the way, and in a capacity, of mastering for himself the whole circle of the moral sciences, just in the same manner, as a faithful grounding, in the elements of grammar, is the indispensable condition of a mastery of languages, and skill in mathematical science,—the only possible foundation of real proficiency in astronomy or mechanical philosophy. It is, only, upon the basis of psychology, that we can hope to rear a sound and solid superstructure of either intellectual, ethical, or political philosophy, nor is it from my purpose here to remark, that the most subtle and dangerous forms of modern scepticism, from Spinoza and Hume down to Hegel, Fichte, and Schelling, are founded upon principles and reasonings which cannot be refuted, nor even so much as comprehended by those who are incapable of sounding the very depths of psychological science. On these grounds I do most confidently contend for the necessity of making the analytical part of mental philosophy, or what may be called the anatomy and physiology of the mind, the principal, the paramount object of our teaching in this department of our Theological College. Every question of theology that does not depend upon the interpretation of the original Text of Scripture, that is upon Biblical criticism, and Exegetical and Oriental learning, will be found for the most part to involve more or less a reference to the principles of human nature, and so far can only be decided by an appeal to the testimony of consciousness, in other words to the science of psychology, as the last and only authoritative tribunal, If there are questions that are not to be settled by reference either to philosophical, exegetical, or theoretical principles, these will be found to come under the head of History and Antiquities, or of Geography and Chronology. It would be desirable therefore to adopt as

a part of our established course—which might be connected with the philosophical department,—the philosophy of history, or rather general history contemplated in the light of Scripture, as the mirror or exponent of God's Providence and moral government, embracing geography, chronology, and antiquities, as they have a special bearing on the interpretation of Scripture, the fulfilment of prophecy, and the history of the Church under the ordinary Providence and Government of God. Such is the estimate of what appears to me to constitute, on a liberal scale, a sound and effective Theological Education, embracing—

I. Classical and Oriental Languages and Biblical Criticism, which may be regarded as forming the soul and substance of that learning, which must lie at the foundation, and out of which must grow as its living stock and root, all that can qualify the gospel minister to bear witness to the truth, to contend for the Faith, once delivered to the Saints.

II. Mental and Moral Science, and as an appendage to this, History and Antiquities, viewed in their bearing upon Christianity.

III. What I have denominated Physico-Theology, with which might be very well combined Natural Theology, in the largest acceptance of the word.

IV. All these branches, in proper order and succession, would form a noble basis on which theology proper, in its utmost amplitude, would rise up, with every advantage for working out its best results, on minds trained and furnished by such a preliminary course, as we have sketched.

Having thus taken a general view of the principal branches of learning which seem necessarily to enter into the educational system of a well constituted school of theology, I come, in the next place, to a still more important inquiry, on which the most vital and essential interests of the college, certainly, depend, viz., by what principles are we to be guided, in the conduct of the work of instruction, and in framing a general platform and model, by which we may secure the efficient and harmonious working of all the departments. It admits of no doubt that the manner and method of teaching, and the right order and combination of the studies, will be more effectual to secure ultimate and permanent prosperity to our college, than the extent and variety of the subject matter, or even the number and talents of the Professors, if the system be injudicious or ill-concerted.

As my views on this subject are entirely at variance with those which have been set forth by Dr. Burns, in his printed letter, I shall here introduce a brief exposition of my own method of conducting the work of instruction in the department of mental and moral philosophy, comparing or rather contrasting it, with the Doctor's scheme of practical philosophy and practical logic; and, that nothing may be wanting to enable the Synod to form a conclusive judgment, I shall subjoin, in the appendix, a copy of his printed letter, together with a draught or sketch of a scheme of education, and an exposition of the principles on which it was founded, submitted by me to the college committee during session 1846,7; from which it will appear that the question is not altogether a new one, but in fact has been the subject of repeated and warm discussion especially between the Doctor and myself. As the same general principles are applicable to all the other departments, the discussion, of our conflicting opinions and methods, in regard to the philosophical branches, will, with a few additional observations, conclude this second head of my statement, and go far to exhaust the subject.

The method of instruction, which has approved itself to my mind, and which I think I have found effective and successful, in my own experience, is that—which begins at the fountain head of all the sciences which have man or mind for their object, *Psychology*, and—lays the foundation of this master science (for such assuredly, in the language of truth and soberness, it is) deep and solid, in a systematic and faithful analysis and exposition of at least the leading faculties, operations and phenomena, of the sensitive, intellectual and moral constitution of man. Nothing less than this can be deemed sufficient for a department of science, of which the end is to develop the nature of the noblest creature of God, to conduct man to the highest and best knowledge,—of which it has been well said, “the proper study of mankind is man.” How much more is its importance enhanced, when we bear in mind that it holds the same relation to logic, ethics, politics and natural theology, as mathematics to astronomy or optics. Under the head of mental philosophy, which forms the first division of my course and occupies the greater part of the junior class session, I adopt as my text book “Reid's Inquiry;” following up his developement of the powers of external perception, with a consecutive analysis of the pure intellect in the successive order of its powers. And I may just remark,

variance with printed letter, method of con- of mental and g it, with the al logic ; and, form a conclu- of his printed of education, founded, sub- 1846, 7 ; from er a new one, rm discussion same general the discussion, to the philoso- ons, conclude ust the subject. d itself to my successful, in ain head of all et, *Psychology*, uch assuredly, and solid, in a at least the nsitive, intel- than this can which the end od, to conduct has been well much more is t it holds the aeology, as ead of mental ae and occu- pt as my text of the powers the pure intel- y just remark,

here, that so widely do my views of sound and solid philosophical training diverge, from those of Dr. Burns, that if I can happily succeed in grounding well my students in this first but most essential and arduous portion of my course, I congratulate myself as having accomplished already half my work ; and I judge that those pupils who have mastered even this modicum of the science, have got over the *pons asinorum* of metaphysics, and, what is more, have, in my judgment, gone through a practical training of the most effective kind in logic, and had their capacity for close reasoning, nice distinction, and the most subtle exercise of definition and abstraction, *even severely tested*. The youth who has mastered even this little portion of the *great* work of Dr. Reid, has, according to my estimate, thereby received the best possible training in practical philosophy and practical logic. In the next and higher department of moral philosophy, taking Butler as my guide, but throughout the whole of my course combining such portions of Reid, Stewart, Brown, Abercrombie, and other standard authors, as may seem necessary or suitable to elucidate, supplement and perfect, the views exhibited in the text book, I prosecute the same work of analysis, in the developement of man's active and moral powers. The mode of instruction which I have pursued with great satisfaction hitherto, as to the practical results, has been what I might properly denominate *catechetical lecturing*, sustaining and quickening the attention of the student, by frequent questions on the most important points or principles, following this up with a recapitulatory examination, after every second or third lecture ; and, in my junior class, dictating, under the head of every several faculty analysed, a series of questions, to which written answers are required from each student ; and if the subject be abstract or of very difficult apprehension, the same question is put in such a variety of forms, as may ensure the end of imparting at once a clear conception and full conviction of the truth. Several hundred questions were thus dictated, and, with rare exceptions, satisfactorily answered by the junior class. In the second philosophical class, the first part of the session is devoted to logic, nay, what I feel abundantly warranted to call a practical logic, in the truest and best sense of the term, directing attention mainly to the origin and classification of ideas, and to the nature of language ; considered as an instrument of thought, its imperfections and abuses, with their remedies, taking Locke's second and third books gene-

rally as my guide. This part of my course was concluded last session, so far as the very narrow limits of our time would admit, with a practical exemplification of the syllogistic logic, illustrating its nature in a multitude of syllogisms, sound or sophistical, and tracing the laws of a rational logic to their true and only possible source, clear, full, faithful, well defined conceptions, as the condition of all sound thinking, and indeed the prime fundamental element of all intellectual excellence.* In the department of ethics, which immediately succeeds logic, and with which I was obliged to wind up, too abruptly, the work of last session, the committee having resisted my urgent solicitations to extend the time from three days or hours to five each week, which would have enabled me to take in natural theology and the elements, it may be, of political philosophy, I deemed it the best wisdom, to concentrate the time and attention of my students, upon the analysis of the moral constitution of man, as laid down in the sermons of Butler, incorporating not a little from the invaluable work of "Stewart on the Active and Moral Powers," with occasional references to Reid, Brown, McIntosh,—adopting, as our class manual, "Abercrombie on the Moral Feelings." To assure myself that I had not labored in vain to impress upon the minds of my students a clear and faithful outline of man's moral nature, and the systematic relations of the various powers, whether classed under the understanding or the will, to the great end of his being, and to the sovereign power of conscience, I drew up a series of testing questions, which could not possibly be answered without an intelligent comprehension of the moral system as a whole. Indeed, I may, with the strictest truth, claim for the whole course of my philosophical teaching the merit of being strictly and eminently *practical*, but the *practical united with the speculative*, and this vital union, like that of body and soul in the human frame, never being dissolved or suspended. For example, when engaged in the analysis of memory,—the laws of its operation,—the relation which it holds to the association of ideas,—the best method of cultivating it,—were fully brought out and insisted upon; and several lectures, followed up with close and searching examinations, were employed in unfolding the admirable method of intellectual culture, which Stewart, in treating this faculty, has so

* See Dr. Reid's *Essays*.

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clearly demonstrated and so eloquently recommended. In the analysis of the imagination, in like manner, the greater part of my instructions would come under the head of practical philosophy, unfolding the influence and power of imagination, in its operation upon our intellectual, social, moral and religious nature, in its connexion with genius, taste, invention in arts and sciences, in its influence on human happiness and the progressive improvement of human nature and human society. At the hazard, perhaps, of being thought tedious or egotistical, I have expatiated on my method of philosophical teaching, at greater length, than I may leave nothing undone, on my part, to set before the church and the world; a clear view of the whole question, and furnish the data, by the help of which, no competent judge will be at a loss to reach a sound conclusion.

The great question, then, on which Dr. Burns and I are at issue, is the connexion of theory and practice, in other words of science and of art, and the comparative stress which it is wise to lay upon each of these constituent parts, related to each other, as the body and the spirit, in the animal frame. The intimate dependence of the practical branches of the science of mind, logic and ethics, upon the knowledge of its constitution and functions, may be familiarly illustrated, by the analogy of physiological science. As no man can become a trustworthy practitioner of the healing art, who is ignorant of the preparatory sciences of anatomy and physiology, so no man is capable of attaining the highest practical mastery of logic, which is the practical conduct of the understanding, in the search of truth, or of ethics, which is the practical regulation of the heart and of the will, in the conduct of active life, who is not scientifically acquainted, with what Brown has termed the *physiology of the mind*. And of all species of quackery or empiricism, none can be conceived more mischievous or contemptible, than that which would convert a seminary of liberal science,—designed to train up the moral and religious teachers of mankind, in an age at once so enlightened and so sceptical, to be the interpreters, guardians and vindicators of the oracles of the living God and the faith once delivered to the saints,—into a school, not of sound philosophical accomplished thinkers, moralists, divines, but mere praters of *dilettical* technicalities, word-catchers, sciolists and pedants. The higher and nobler the science or the subject to be taught, just

so much the more aggravated and unpardonable is the charlatanism which would, perversely and unnaturally, divorce the practical art from its union with the science or theory, which gives it all its life, coherence and unity. What enlightened educationalist will not concur with me, in the judgment, that a practical logic, that does not spring out of the living root of a thoroughly digested knowledge of the nature, operations and laws of the reason and understanding, is not only worthless, for any purpose of sound science, but must prove positively injurious, from the necessary tendency of all such purblind and unintelligent working of the noblest powers and faculties, to mechanize the mind, so to speak, and to deaden and paralyze those native energies, which it is the highest end and office of all genuine science and well-directed education to develop, to quicken, and to perfect. It argues great simplicity indeed, and ignorance of the true principles of practical education, to believe that knowledge is poured into the human mind, as water into a bucket, or that there can be any virtue or vitality in the mere hearing of a course of lectures in practical logic, practical ethics, practical rhetoric, practical philosophy of the mind, all grounded upon a slight synopsis, or summary of the only true science, psychology, which bears to all these its derivative and practical branches, the same relation which the root or trunk of the tree does to its branches, which the perennial fountain does to its stream. I would as soon believe that Dr. Burns might make a perfect living tree out of a bundle of rotten sticks or withered branches, gathered at random,—or unite the dismembered parts of an animal body, after dissection, so as to live, move, breathe and walk,—as train up, in this way, any of God's rational creatures to a capacity of thinking, reasoning and acting, worthy of the mind and its native endowments. The Doctor's projected system of philosophical training begins with a plain common sense view of the powers and capacities of the human mind, with rules for their improvement. But it is evident that this cannot be more, in such an extended and comprehensive course, as he has laid down, in his printed letter, than the slightest summary or syllabus, utterly impotent to serve as a foundation, for the practical branches, to which it bears, without all question, the relation of a science to its proper art or arts—and separated from which they must be a body without the soul, a mere *caput mortuum*, as worthless and meagre to the poor

starvelings, doomed to such dry, pithless, mental aliment, as the *Trivium* and *Quadrivium* of the early medieval schools. The second, third, and fourth divisions of the Doctor's practical philosophy, which are to rest upon the narrow foundation of his psychological synopsis, stand thus: and here I must confess my inability to divine on what logical or scientific principles the Doctor has framed his whole platform. But let us just glance at the successive parts of this lengthened series of philosophical practicks. "2. The nature of evidence, and the laws of its regulation. 3. The laws of reasoning or logic proper," (should not this, in the natural order of science, have preceded the former,) "including condensed views of syllogism and induction, with analysis and synthesis, and the rules of correct definition." "I know not," the Doctor remarks here, "a better mental exercise than an occasional examination on the ambiguous words in 'Whateley's Logic,' or on the definitions in 'Taylor's Elements of Thought.'" "4. The nature and sources of prejudice; the causes of error, the idola of Bacon, and the large tribe of fallacies in argument, present a wide but most inviting field for young enquirers; and here the dangerous errors afloat among philosophers, as to the nature of causation, demand careful searching. Some of the most plausible and pernicious forms of modern scepticism may be traced to these errors."

These three divisions, resting on I know not what grounds of either science, or, to use the Doctor's own words, common sense, all belong, with the exception of the doctrine of causation, which is curiously enough classed with the idola of Bacon, to the science or art of logic. It is somewhat remarkable that Dr. Burns has omitted, in this very detailed view of the science, to include what I have always regarded as infinitely the most essential and invaluable part of logic, the analysis of our ideas, of which words are the representatives, the mechanism of language as the instrument of thought, its use and abuse—and the nature of general terms, on a clear and accurate conception of which, the whole of this science, so far as it deserves the name, may be said to hinge. Since the great business of logic is to teach the use of language, as the instrument of thought, is it not preposterous to deal with the sign before we have made ourselves acquainted with the thing signified? Locke, Reid and Stewart, have not been guilty of such a blunder in their disposition of the parts of mental science. Locke begins

with the analysis and classification of ideas in his second book, as preparatory to his third book on words; and Reid, Stewart and Brown, have all determined that logic comes after a complete and detailed analysis of the laws and operations of that understanding; to which it offers itself as a guide. Can Dr. Burns believe that the practical arts, which are designed to direct the understanding, in the search of truth, or to govern the will by the laws of reason, conscience, and scripture, can have any other light to guide their action than that of an intimate knowledge of psychology; or, to vary the metaphor, can be sustained on any foundation less broad, deep, or solid, than a thorough insight into the system and working of that mind which is to be developed, enlightened, and trained, to the discovery of truth on the one hand, or the practice of moral duty on the other? Let me faithfully instruct a youth in the psychology of Reid, and what will he lack of all that Dr. Burns' practical philosophy professes to embrace. Nay, much more than all that he contemplates, in his letter, is comprised in a complete course of psychology; while the fatal error of dis severing the practice from the principle, the art from the science, is precluded. In the one case, it is the vain attempt to form an entire living tree out of dry and dead branches, which have no root or stock, on which we can engraft them. In the other case, it is working with the laws and powers of nature on our side, digging about the roots, watering the plant, pruning the redundant branches, and giving every aid and scope to nature, to do her own work in her own way. This is the shortest, the most direct and easy way, to obtain more than all that the Doctor has embraced, in his very comprehensive outline; while the student, with such a preparation as I desiderate, would be qualified to acquire a mastery of all the moral, political and metaphysical sciences, just as a finished mathematical scholar is furnished most perfectly, for the study of astronomy, optics, or mechanics. There is another fatal objection to Dr. Burns' method of practical education, that, in destroying the systematic order and connexion of the sciences, and of the constituent parts of the same science, it reduces the subject matter of education to a state of chaos; and making the business of learning, the labor of a mechanical memory for words and terms and definitions, condemns the student to the servile drudgery of copying the opinions, arguments and dogmas of other men, instead of laboring to qualify him for the exercise of his

own powers, directed by the light of science and developed by a truly scientific culture and discipline. To teach logic, by beginning with the exercise of definition, unintelligent and mechanical as it must needs be, if thus taught apart from psychology, and without any foundation, whatever of science or theory, would be just the same absurdity as if a master in any of the common physical or mechanical arts should,—after giving his apprentice a hasty glimpse or peep at the interior structure of some machine or engine, suppose a clock or a watch, neither of them certainly more complex or intricate in their fabric than the mind of man, and then hurrying him into the shop or lecture room and exhibiting all the isolated parts of the mechanism, without any systematic order, on the table,—should vainly strive in this somewhat odd and round about way, to bestow them into the practical art of making clocks and watches. Does not common sense dictate that the only way to train the apprentice to a practical knowledge of clocks and watches, as to their structure or working, as to their derangements or repairs, is, to familiarize him to the contemplation of the entire machinery, whereby the connection and action, the names and offices of all the parts, in relation to one another, and to the end of their whole working—would be most readily and perfectly apprehended. What would any of our merchants think of a youth, who might offer them his services as a clerk, if he were to tell them, that his knowledge of book-keeping had been learned from such a manual, as that of “Taylor’s Logic,” giving the definitions of the words—ledger, posting, balance sheet, &c., and no more? Just such is my estimate of such practical logic and practical training, as is recommended in the printed letter. In fine, (for I fear lest I be deemed tedious and trifling in thus dwelling at such length on principles which have very much the appearance of self-evident truths,) as the structure and economy of any organized body are best apprehended and understood, when we examine the plant or animal as it exists in nature, having under our view at once the whole constitution and economy, the living system, in the unity, continuity, and simultaneous and harmonious working of all the parts and organs; so the mind in all that pertains to its constitution and working, must be first studied in the connection and continuity of its faculties and functions, if we may be permitted even figuratively to apply such terms to the mind and its operations,—infinitely more perfect in

their unity than the constituent parts and organs of the animal body, —before we can, with any advantage, proceed to take up, either as teachers or learners, the practical branches of psychology. How is it possible to make the defects, irregularities or derangements of a machine, in its structure or working intelligible, unless the subject of your instruction, has been previously and thoroughly trained in the knowledge of the whole mechanism, the regular order, and right action of the parts and movements? and how quickly will the student who is familiar with the fabric and the functions of a machine, or of a plant or animal—apprehend, and how easily and accurately retain in his memory all the terms of art, and give faithfully their definitions, not from the blind force of a mechanical or unintelligent memory, but in the clear light of scientific knowledge and the fast hold, which his mind has taken, of the laws and principles, in whose simplicity and unity, the interpretation of nature becomes easy, when we proceed, in the orderly course of a truly scientific and philosophical method.

We have, in the researches of the greatest of physiologists, Cuvier, on Fossil Osteology, a rare and splendid monument of the power of human genius, when it prosecutes its favorite studies with such advantage. It was, in the perfect mastery of anatomy, both human and comparative, and, “by examining minutely and thoroughly the bones of all those species, which, or the resemblance of which, are supposed to have furnished the materials of the great deposits of fossil bones so abundant in every part of our globe,” that his creative genius may be said to have reproduced successive generations of actual races of animals, which have peopled it, in the various stages of its geological transformations. It is thus that the eye of science, in the *true philosopher*, may be said to be prophetic, and his mind inspired so as to rival the imagination and inventive powers of the *great poet*; and if the transcendent genius of Shakspeare “exhausted worlds and then imagined new,” we see that a skilful proficient in science is possessed of principles, in the power of which he is enabled to evoke lost kingdoms of nature, and to fill the desolate voids and wastes, which all-destroying time has wrought, in the works of creation. It is this which makes the knowledge and mastery of a few great principles or cardinal truths, worth all the mechanical teaching and empirical learning in the world. The latter is just like indigestible food thrust into the stomach, which can never

minister to life and health; but the greater the quantity and variety thus introduced, so much the more are the vital powers and organs overloaded and oppressed. Such appears to me to be the character and tendencies of the system of practical philosophy, and the method of practical training, which the learned Doctor propounds and recommends to us. How vast a compass and variety, and what a world of the most profound and abstruse problems and theories of physics as well as metaphysics, does the Doctor's scheme, which he has by a sort of antiphrasis, denominated a "Common Sense view of Philosophy," avowedly embrace. Practical psychology, logic proper, the nature and laws of evidence, are only the three first links of an almost interminable chain, like that of Jove let down from "great Olympus height," suspending air and ocean and earth—the *quæstio versata* of causation—the ideal theory in all its forms, ancient or modern, in all its proteus-like metamorphoses, in its progress, successively, through the metaphysical alembics of such sorcerers in science, as Descartes, Malbranche, and Locke, and, though latest, not less subtle and venomously heretical, than these patriarchs of error, his archetypes, our own Thomas Brown. It is a little curious to find that Bishop Berkeley brings up the rear of these idealistic philosophers; and I am sure these two last would stare, in mutual wonderment, could they be made conscious of the fact, that from a state of apparently extreme antagonism, they have been thus brought, by the singularly penetrating sagacity of Dr. Burns, into the most perfect amity and good fellowship.

Though the names of Reid, Stewart, Campbell and Beattie, are introduced, immediately after these heresiarchs of philosophy, as furnishing the *antidote to their bane*, I cannot perceive that any provision is made, nor indeed a single nook or corner left, in all the wide circumference of this universe of science, for the teaching of *their orthodoxy*. Does it not strike our academical reformer that in this *instauratio magna*, where all false philosophy is to be put into the crucible, and its baseness detected and exposed, there may be a danger, in the rude and unpractised minds of such novices, as are to constitute this preparatory school of philosophical practice, that some taint of these heresies may be communicated to tyros in philosophy, as yet devoid of the knowledge of the true systems; or that this multiplicity of false theories and vain hypothesis, resembling the ghosts in *Macbeth*, like "shadows coming and departing,"

may haply shake the confidence of the bewildered youths, in the reality of truth itself, and thus create that very scepticism and infidelity, which their learned master, in his pre-fervid zeal, as the *smallus hereticorum*, is straining all the nerves of eloquence, argument and learning, to confound and annihilate. I would fain know the secret mystery of that art, by which Dr. Burns undertakes to achieve all these wonderful feats of philosophical training, without giving more than a mere synopsis of psychology. It were in my judgment, just as reasonable and sober minded a project to undertake to teach the system of the physical universe, as it is demonstrated in the principia of Newton, or the mechanique celeste of La Place, to pupils ignorant of mathematical sciences—and to prepare them to solve all the highest and most abstruse problems of practical astronomy, optics, or mechanics,—by means of a few popular lectures,—without even a mustard seed grain of science in them,—by a petty manual of definitions, like “Taylor’s Elements”—light and dry, as withered leaves, of autumn, hard as the remainder biscuit after a long sea voyage, and indigestible by weak juvenile intellects, even as cormorants’ food by the stomachs of children and babes—as to think of condensing the philosophy of man, of the great world of mind, *the microdium*, as it has been, in this view, significantly and emphatically termed, into the minikin dimensions of those very *curt manuals* of modern education, which commonly bear such titles as “Science made easy, or familiar conversations on Philosophy, Geology, or Metaphysics by a Lady, for the use of young Ladies at Boarding Schools.” We know by melancholy experience, the fruits of such practical philosophy and popular science, it is sowing the wind, it is worse than doing nothing.

To let me assure Doctor Burns, from some practical experience in the actual working of education, (*for I am the man that has been a schoolmaster*) that however easily and ably he might perlect on all those manifold topics, and embody a mass of science, more various and profound, if possible, than all that he has specified, among those for whom his Lectures are designed, he will find no not one,—capable of comprehending the very smallest part of such theories and still more recondite metaphysical problems as he has expressly stated. As soon as the voice of the lecturer dies away in their ears, it will be found that he has fulfilled the old adage (*operare*

nil agit)—he has been pouring water into a sieve, milking the he-goat, and the poor student's will go away, from this tantalising school, hungry and thirsty, as they entered, with minds dark and void, the light of such illusive science vanishing, as the rainbow's lovely form, or, rather like the midnight meteor, swallowed up and lost, in the darkness from which it sprung. The impression on the mind of the hearers, will be that of a man beating the air, it will leave no sensible appearance or manifestation—such abortive essays of science and of teaching, *cannot in the nature of things come to the birth*, they perish without ever seeing the light. I do not speak, unadvisedly, in all that I have now advanced. A youth of very superior talents, having no inconsiderable share of the genius of the poet and the philosopher, during the session of Knox's College, 1845-'46, had been somewhat prematurely withdrawn from his natural position as a preparatory student, and, by a sort of academical impressment, hurried, before his time, into the very *empyrean* of metaphysics and divinity. Here, in the full and auspicious enjoyment of the Doctor's instructions, with all his supplementing of logic and philosophy—elsewhere so lamentably defective, as he found it,—this young practical dialectician wrote an essay on logic, which, though he had the timely aid of a system of that science recommended by Dr. Burns (Brewster's, I believe), was, from first to last, so unintelligible and ridiculously absurd, that neither Mr. Rintoul nor myself could divine its plan as a whole, or trace the least connexion or coherence of the parts. This same youth, one of our most talented and now most promising students, resuming his studies, after a year's interruption, has just gone back to the preparatory studies, classical and psychological, from which he had been very unseasonably and unreasonably withdrawn; and to prove how little he could have profited, by the logical lectures and exercises, it is enough to add, that this last session, 1847-48, he joined himself, of his own free motion, to my junior class of philosophy, after entering and attending a few days the senior one, and candidly owned, at the close, that he had, for the first time in his life, been taught, by me, to understand the nature of general terms and the mechanism of language, as an instrument of thought; and this knowledge, let me add, was communicated just in its only proper time and place, while I was engaged in the analysis and exposition of the mental operations of abstraction and generalization, the very

alphabet, so to speak, of logic, and key to any scientific or sound and solid knowledge thereof.

Let Dr. Burns just make the easy simple experiment, of teaching such a modicum of psychology, as is contained in "Reid's Inquiry; and, if he will estimate the work done, not by the number or ability of his own prelections, still less, by the number and variety of the subjects or questions, which may have been brought under discussion in them, but by the sober certainty of the amount and value of the clear intellectual gain which has accrued to his students, the only real criterion, he will, if I do not greatly deceive myself, find one good half of the session well nigh spent, before he can conclude with confidence, whether they have reaped any fruit, from all that he has sowed. There are always two parties, let Dr. Burns remember, in the work of teaching; and the grand result is, certainly, determined as much by the qualifications of the learner, as of the teacher. There will be, at least, one good half of his time occupied in examinations and oral and reiterated catechisings of his pupils, individually; and if they can bear, at the close of the session, a searching examination, on this first, but certainly not easiest portion of the science, great praise will be due to the teacher, certainly not less, I should say, than to his scholars. No doubt this would produce a woeful retardation of that rapid and extended career of academical triumphs which the Doctor, with too sanguine hope, promises himself; but let me add, for his comfort, he will find, in the end, a full reward of his faith and patience, in the spirit and power with which his students, in virtue of such a thorough initiation, will be prepared to do their subsequent work, in the best style; and in all probability to go over, with a daily acceleration of their onward progress, as much ground during the residue of the session as, in the judgment of all reasonable men, will do equal honor to the teacher and the taught; if only it be borne in mind that true science and enlightened education have the effect, not of cramming the memory, with the words of the text book or the lecture, or of occupying the mind, with the thoughts of other men and the doctrines or dogmata of schools and systems, but chiefly of quickening the native powers of the mind, and, like the art of the husbandman, sowing the prolific seed of truth, digging about and dunging it, watering and fixing deeply the roots of the tree of knowledge, pruning its redundant branches, and rather following and co-operating

with nature to give full scope to the influence of air and earth and sun and soil, than vainly and presumptuously usurping her place, or disturbing her laws, or in any wise attempting to *lead or command* where it is *our all, our only wisdom, to obey*. If I may not be suspected of having caught the contagion of the boastful vein, bold as the attempt may seem, I could almost venture, *on one condition*, to teach, and that effectually, all, or nearly all, that the printed letter has sketched. If Dr. Burns will undertake, on his part, to prepare the pupils for the extensive range of practical philosophy and science which he prescribes, by a perfect mastery of the mental constitution, as developed by Reid, and of the moral, as demonstrated by Butler, I may venture to charge myself with the far easier and less meritorious task of putting pupils, thus grounded in the right method of nature and of truth, through all the forms of error, whether the false theories or mere hypotheses of speculative philosophy, or the misapplications and perversions of the practical.

How easy is it for the enlightened psychologist to divine for himself the proper confutation of all false systems, which run counter to the well known order of the mind and its original constitution; just in the same manner and on the same grounds, as the well educated physician, and the well trained watchmaker, will discover at once the least breach or derangement, the least malformation or maladjustment of the parts, or perversion and irregularity of the order and working, of the proper subjects of their respective arts. Error, it has been said, is to truth what the wrong side of the tapestry is to the right; the latter being seen, we can infer the former. To profess to teach all the false theories, before we make sure of putting the learner in possession of the *truth, whole, sound and pure*, is a preposterous and not very innocent, at least not a harmless labour. Error is manifold, endless, and, Proteus like, disguises itself, under a thousand shapes and colours. Truth is one, simple and congenial to the intelligent and rational mind. Teach first the truth, which is the touchstone at once and the antidote of error. Suffer not the pupil, to enter the dark and inextricable labyrinth of error, until you have put into his hand the thread of truth (*filum Ariadnes*) to guide him through all the intricacies of the perplexing maze of opinions, theories, hypotheses, physical, metaphysical, or moral.

The conclusion of the whole matter, then, seems to be, that if the Dr. will just reverse the order and method of his practical, or, as I

must deem it, impracticable philosophy, and give to psychology that relative place and that share of time, and teaching, to which its paramount importance entitles it, he may, I am prepared to admit, accomplish all, yea more, than all, that even his printed sketch has set forth. It is one of the prophetic anticipations of the great seer of modern philosophy, the grand instaurator of true science, that its actual triumphs, secured by a faithful conformity to the method of the *novum organum*, would far outstrip the most vain-glorious pretensions of magic.. On the same ground, I proclaim my conviction, that a truly scientific education would work greater wonders than all the charlatans of the art have ever professed to achieve.

The science of psychology is of a very expansive nature and has an eminently prolific virtue. What, I would here ask, is the secret of the transcendent superiority of such master minds as Bacon, Leibnitz, Descartes, Locke, Clarke, Kant, Stewart—who have been equally distinguished by the depth, the variety, and the comprehensiveness of their learning? Just that which has made Shakespeare's name unrivalled—"inspection keen through the deep windings of the human heart." All of them are pre-eminently signalized by psychological genius.

All practical rules and processes, in order to take a fast hold of the memory, must first be incorporated, so to speak, with the understanding, and for this purpose, must be grafted on the living stock of pure theory, or scientific principles. The fact, or phenomenon, must be seen in its natural relation to the law, the cause. The law or cause must be seen in its relation to the whole code or system of nature's legislation, in that particular province; and the several provinces of the intellectual world should be exhibited, not only in their isolated state and individual aspects, but in their connection and harmony with the great system and economy of the universal creation and providence of God. It is in thus preserving the systematic unity, that we give vital power, as well as symmetry and coherence to science and philosophy. In this way only, can our knowledge be said to have life in itself, or prolific vigour, so as to become fructifying and self-propagating. Empirical education may be compared to a man who sows dead or unprolific seed, or sticks into the soil rotten roots or withered branches, which have no principle of life, growth or increase. The sound teacher having first carefully prepared the

soil, sows his good seed, and without expecting in spring the fruits of autumn, hath long patience for the precious fruit, waiting for the early and the latter rain. Remembering the wise adage, "that soon ripe is soon rotten," he does not preposterously set himself to thwart or force the course of nature, or unduly to accelerate her wisely deliberate action and progress, but as becomes her enlightened interpreter and faithful minister, leaves the well-conditioned mind into which the right seed has been cast in the right season, to attain, in the vigorous action of its own genial powers of life and self-development, its destined perfection.

There is no limit, to the increase and propagation of the seeds of knowledge, sown in this manner, and committed to the only power and influence, which can foster and rear them up, to the maturity and perfection, of which they are capable. Knowledge, which is thus allowed to grow up from native principles, inherent in the mental soil, on the one hand, and in the seed, on the other, like the organized body, animal or vegetable, not only possesses the power of self-development, vital increase, and reproduction, but has all its living parts, disposed and combined, with perfect order and symmetry, so that they being many, are yet all one body; and while this gives coherence and connexion, binding the most complex and heterogeneous elements, into one homogeneous and simple system, it facilitates the comprehension, and ensures the complete and durable retention in the memory, of all the relations of the whole to the parts, and of the parts to one another, and which is still more important than all,—of the whole and the parts to the final end or cause, the will and purpose of Him, who hath made nothing in vain, whose work is perfect.

The science of mind—of man, is the centre and source of life to all the rest. It is here that their roots must all be fixed, in order that knowledge may become to the mind, what food is to the body,—a quickening, invigorating, creative power. All the moral sciences, it has been already observed, including jurisprudence, politics, national and international law, natural theology, the far greater part of literature, history, poetry, criticism, belles-lettres, the extensive province of taste and the fine arts, all enquiries and speculations, that have for their object *man* or the *world of spirit, society, God*, have all their living roots in this soil, and cannot live, much less flourish, in any other atmosphere or element. The doctrine of causation, the origin and classification of our ideas, with all their

varying forms and modifications, the nature of reasoning, or logic proper, the various kinds and laws of evidence, the doctrine of prejudice, or the idolatries of false philosophy, the nature of the relation, which subsists between the ideas of the mind, and language, as their organ and vehicle of intercommunication, the singularly interesting, complicated art, displayed, in its adaptation, to express the endless variety of human thought, and the almost creative power with which it moulds the objective universe, casting it anew, as it were, into the subjective form, reducing it to a proportion, commensurate with its own vast but still limited capacities—bringing it down to the level, assimilating it to the model, and condensing it into the measure and compass of its apprehensive faculties—all these subjects are manifestly so intimately bound up, nay, so essentially identified with psychology, that the attempt to separate or divorce them, from this natural union, is to destroy the very vitality of science, to make art mere quackery, and to reduce philosophy to a dead letter, a *caput mortuum*. The most formidable and by far the most profound arguments, which have been brought forward against natural and revealed religion, such as Hume's argument against miracles, subverting the foundations of Revelation, and his other sophism, grounded on the world's being a singular effect, subverting that of all faith in the Being and Providence of God, or of natural religion. All the doctrines, metaphysical and theological, of Leibnitz, and Descartes, and of the modern German and French schools, of which these great men are the heads and fathers, can only be comprehended, and their errors exposed, by the power of this master science. The ideal, the sensational, the mystical, the pantheistic, the selfish, the sentimental, the rational systems, the system of necessity—can only be unmasked, in the clear light and atmosphere, of an intelligent comprehension, of the right order and working of the mental and moral constitution of man.

In confirmation of these views, I shall here avail myself, of the testimony of an author, Morell, from whom Dr. Burns seems to have borrowed some of his strictures, especially his unwarrantably severe animadversions on Brown—see note (A) at the end of volume II. of his modern philosophy, entitled "Philosophy, Theology, Religion:" "We must establish the philosophical value of our primary theistic conceptions, by the light of a searching psychology; and it is only when we have laid firm our basis, in the inviolable depths of

human consciousness, that we can proceed to build up the noble superstructure of a sound theology. Unless these principles be established, theism fails of a scientific foundation; and theism thus failing, natural theology has not its primary idea, and revealed theology is wanting, in the very conception, which gives it all its authority and power. We affirm, therefore, that all theology, whether natural or revealed, like every thing else which appeals to argument for vindicating its truth, must be grounded on the data of our consciousness, and the exercise of our faculties. To deny this, is to deny the right of appeal to the human understanding in such matters at all; it is to sacrifice the very idea of having a rational basis for our religious belief; it is to give up the possibility of a theology properly so called, and set the whole of our theological conceptions afloat upon the uncertain ocean of mere feeling, or of human tradition."

Again in another part of the same note, "Theology, as the very termination, *ology*, implies, occupies itself solely in the reflex and logical; and it is for this reason we affirm, that we must seek for its basis, in the depths of our psychology. Take the instance of beauty as an illustration. We have a spontaneous apperception of the beautiful in nature or art. To find the beautiful, of course, we need no psychology; but is it possible for us to ground the theory or science of beauty, except upon the basis of psychological principles? So in natural theology;—to establish the principle of causation, upon which the whole, a *posteriori* argument depends, is an affair of psychology; to find the scientific use and value of our pure spontaneous apperceptions, is an affair of psychology; to furnish the logical explication of the manner in which we rise from the idea of our own personality, to that of the infinite personality, is an affair of psychology; in a word, take away psychology, and though we may feel the presence of the infinite Being, and love him still, yet we can have no theology, no scientific basis for our belief. Nature alone can never give us the infinite; and how are we, therefore, to ascribe infinity to the Deity, unless we shew, *philosophically*, that our spontaneous perception of the infinite is grounded in real scientific truth. This conclusion is evident, not only when we turn our attention to the conception of a God, as the foundation of all theology, but equally so, when we consider many other of the conceptions which the truths of revelation involve.

Revelation comes to us in the form of words ; these words, in order to convey to us their full meaning, must be fully understood. But how can this full understanding be attained ? Experience alone is sufficient to tell us that the ideas which are embodied in many of the words and expressions of Revelation, can only be adequately comprehended, by means of the progress that we make in moral thinking at large. The idea of creation, of Providence, of human freedom, of moral evil, of retribution, of grace, and of spiritual regeneration, all of them involve conceptions, which can only be evolved into highest brightness, by the intense application of the reason upon them; that is, by the co-operation of philosophy in the elucidation of divine truth. We find, then, two important relationships which philosophy bears to theology ; first, that it must afford it a scientific basis ; and secondly, that it must clear up to us the great primary moral conceptions which revelation involves, but which it leaves us to investigate and develop."

I should have thought it worse than superfluous, to have disserted so *elaborately*, and, as it may be felt, by many of my readers, *tediously*, on the general principles of a scientific education, were it not, that a majority of the members of our College Committee, having given the respectable sanction of their names and authority, as I cannot but think, very rashly and inconsiderately, to one of the most exceptionable and anomalous of the manifold suggestions of the printed letter, in recommending the immediate establishment of a class of practical logic, have thereby, it seems to me, virtually homologated its general principles ; at least, by no single act or measure, could they have more emphatically set their seal to these doctrines, than has been done in this *senatus consultum*. The most plausible argument advanced and urged by the advocates of this measure, was the precedent of the logic class, of the Glasgow university, of which they all happened to be alumni; two only of the five members present at said meeting, having been educated at Marischal College, Aberdeen, in which a complete reform of the old scholastic system of our universities was happily effected, about the end of last century, under the auspices of one of its most distinguished lights and ornaments, Dr. Gregory, did not go into the views of the majority, one declining to vote and the other (myself) protesting earnestly against this innovation upon the most essential principles of our educational course as it has been

conducted hitherto. I have taken the trouble to look with some attention into Dr. Jardine's outlines of Philosophical Education, and shall now submit the result of my inquiry, into the history of the origin of the Glasgow logic class, and the circumstances, in which it was established, stating the views which guided its enlightened and judicious founder, in his own words, quoted from the introduction of his outlines: "The ancient division of philosophy into physics, ethics, and logic, probably suggested the order of teaching, which has long been followed in the universities of Europe; and, in this arrangement, the first place was assigned to logic; because, it was considered, as an instrument of a peculiar kind, by the skilful application of which, all other knowledge, whether of matter or of mind, was to be acquired."

"The principal universities of Europe, it is well known, were founded during the reign of the scholastic philosophy, which consisted of such a mixture of the doctrines and opinions of the ancient philosophers, as it was possible to derive from corrupt copies, and imperfect translations, of their works. To these were added the numerous theological controversies which exercised the ingenuity, and employed the barbarous style, of the writers of the middle ages; and, as the chief object of education was, to qualify young men for the service of the Church, the motley system, which has just been described, was made the subject of study, in the schools of cathedrals, and of monasteries, as well as in other religious houses." In another part of his Introduction, he states it as "certainly a singular phenomenon in the history of literature," that this science, "should have taken such a hold of the minds of men, as in a great measure, to preclude all other studies, and to constitute the chief occupation of the learned." "It was during the triumphant period of Aristotle's authority, that the plan of education, in the principal academical establishments of Europe, was reduced into some sort of a system; on which account, it is not surprising, that the first place in it, should have been given to his logic and metaphysics. Having once obtained this place in the scheme of public instruction, our ordinary views of human nature, enable us to explain why, in certain circumstances, they should have been permitted to retain their rank, as objects of human study, long after the causes to which they owed pre-eminence, had ceased to exist. It may not perhaps be so easy to account for the singular fact, that, even at the present day, the treatises just mentioned, are, in many seminaries of learning, allow-

ed to hold an almost exclusive possession of the schools, during the principal part of the academical course."

"To shew how very treacherous is the ground on which the majority of the College Committee have argued for the establishment of a class of practical logic in Knox's College, on the plea that we are following the model of one of our most ancient and famous universities, I subjoin the opinion of the illustrious author of the wealth of nations, in his own words: "The improvements which have been made in several different branches of philosophy, have not, the greater part of them, been made in universities, though some, no doubt, have. The greater part of universities have not been very forward to adopt those improvements, after they were made; and several of these learned societies, have chosen, for a long time, to be the sanctuaries in which exploded systems, and obsolete prejudices, found shelter and protection, after they had been hunted out of every corner of the world. In general, the richest and best endowed societies have been the slowest in adopting those improvements, and the most adverse to admit any considerable change in the established forms of education. Those improvements were more easily introduced into some of the poorer universities, in which the teachers, depending upon their reputation, for the greatest part of their subsistence, were obliged to pay attention to the current opinions of the world." This may shew how little any of the principal universities in Europe, founded and constituted as they all were, in the scholastic ages, can be safely adopted, as models of imitation, in framing the educational system of a college, in harmony with the spirit of the age, and the mighty renovation, consequent, upon the revival of learning, and the reformation. They serve rather as beacons, for our warning, and if we look more nearly into their present state and prospects, it will tend rather to force upon our mind, a conviction, that we must seek a foundation and a model, in building up our humble, but, I trust and believe, hopeful College, more suitable to the spirit and circumstances of this age, and of this new world. Certainly nothing could, in my mind, have been more unhappy, than the selection of that particular department of the Glasgow curriculum of study, by the majority of our Committee, as the object of their imitation.

Dr. Jardine, candidly states that, after his appointment as Professor, the former practice was regularly followed for some time—that

is, the logic, metaphysics and ontology, of the scholastic ages of monkish barbarism, continued to be explained by Dr. Jardine, "in the best-manner I could"—he adds, with genuine simplicity, "Impressed" he continues, "with the conviction which the experience of every day tended to confirm, I found myself reduced, to the alternative, of prelecting, all my life, on subjects, which no effort of mine could render useful to my pupils, or of making a thorough and radical change, in the subject of my lectures." In fine, to adopt the Aristotelian phraseology "out of the corruption of this school of medieval dialectics and metaphysics, was generated the substantial form, of Dr. Jardine's famous class of practical logic," got up, much in the same way, and for the same reason, that some antique rude tool or machine,—when, in the slow progress of art and civilization, it has become obsolete, both in respect of its original end and destination, and its form and mode of construction,—is metamorphosed in the best way, which modern ingenuity can devise, to adapt it to the exigency of changed times and circumstances, and make it as available as possible, for present use and service. Dr. Jardine, like a truly wise academical legislator, judging it best not to shock, too violently, the prejudices of that class of men, who may be called abhorers of change or *innovation*,—the epithet by which they love to stigmatize it; although it might have been better and easier, to have instituted a new and totally different department of science than to have mended or new modelled the old intractable subject, determined to retain the established designation of logic class, substituting a sound living science, in the room of the barbarous and bastard one, which—to all but those within the precincts of the university—had, long before this time, been well known to have died a natural death. Like his prototype, Solon, in his legislation, he made that arrangement, which, though not the best absolutely, was the best that, in the circumstances of the age and the university, the case would admit; for the celebrated Dr. Smith had brought a hornet's nest about his ears not long before, by sacrilegiously profaning the latinized ears and echoes of the venerable university, by daring to deliver his prelections in *unbaptized English*, to the great horror specially of the faculty of advocates, who, all in one pack, and in full cry, set upon the audacious perpetrator of this *innovation*. Our wily Professor, no doubt, with the terror of his illustrious predecessor's mishap before his eyes, did the best he could—

he converted "the drowsy shop of logic and metaphysics, as it was opprobriously nicknamed, both by the students and the intelligent citizens, into a popular school of practical learning, well suited to the youth of a great mercantile and manufacturing metropolis, like Glasgow; he wisely preferred the name and character of the *reformer of the now unpopular and opprobrious science of scholastic logic, metaphysics, and ontology*, to the perilous honor, of adventuring to become the *founder of a new system*, much less of such a *magna instauratio*, as the author of the printed letter has set forth; though, had he been quite free and unfettered, it is most probable, that he would have neither chosen, to give it the name, nor indeed, perhaps, any thing of the nature or likeness, of a logic class. The *designation*, if not the actual *form*, was the result, evidently, of necessity, not of free choice; and the real character and design of the class, as explained at length, by its founder, in his outline, would have been more properly expressed, by such a title, as a class of popular and practical training, for such youths as may be destined for the professions of merchants, manufacturers, or men of business, who, need *not the bellyful*, but only, the *mouthful* of learning, as Dr. Johnson, has, in terms—somewhat coarse and uncourteous—predicated to be the sum total, of the national and intellectual peculium of us Scotsmen. Any one will readily perceive, that the exercises, as described in the outlines, of which, by the way, logic, in any sense of the word, forms, but a very inconsiderable element, are evidently calculated, for the purpose, of forming the taste, the judgment, the imagination, cultivating and strengthening the powers of invention, and reasoning, blending for this purpose, into his very miscellaneous plan or course, a very pretty educational *mosaick* of history, rhetoric, criticism, belles-lettres, with, *last and verily least*, logic, all with a view to provide for the intellectual training of youth, who might not have the advantage of a thorough scientific, or classical education; just as practical geometry or mensuration are, very properly, because necessarily, taught in our common schools, apart from the elements of Euclid, or of Algebra, to youth, who have *not means* to procure, or, it may be, time to avail themselves of the more excellent way. It certainly could never have entered into the imagination of Dr. Jardine,—in devising and carrying out this necessary reformation of an essentially vicious system—to conceive that he was furnishing

a model for the constitution of modern universities, any more, than that a similar alteration of an old Gothic castle, would be proper to be engrafted on the plan of some Grecian temple; or that the best practical remedy which he could invent, for an extreme, inveterate, and, as, at the long run, it was felt to be, intolerable abuse of a mediæval school, constructed undeniably in conformity with the somewhat antiquated notions of the Scotists and Thomists,—of scholastic renown,—would ever have been mistaken so far, as to be held a thing perfect in itself, much less as any voucher for the perfection of the whole system—for one of the incurable defects or corruptions of which—it can, in truth, only be regarded as a partial and temporary remedy,—all that, in the circumstances of the case, the vitiated system or decayed constitution could well bear.

But were this the whole amount of the evil, arising out of this blunder in academical legislation, (I cannot call it by a gentler name) the offence were a venial one. But that this is very far indeed from being the head and front of this offending, I hope to make appear very clear, to all who have the least competency of judgment in such matters; and as the vital interests of our College, appear to me, to be involved in the issue of this question, I shall “spare no arrows,” as the ancient proverb goes, but shall first of all, bring before my readers, what in the judgment of the highest authorities in such questions, is the value of the science of logic, in any view that may be taken of it, that we may obtain light, as to the alleged, imperative instant necessity of making provision for this, as the most clamant of all the desiderata of our infant College. Where, I ask, were all the other argus eyes of the majority of the College Senate, that they so strangely and unaccountably overlooked, not only the desiderata, which I have enumerated, under the first head of this statement, but, those which, though by no means of equal moment are yet, in my view, of far greater importance than logic, and bear much more directly and powerfully on the efficiency of our Institution, that are immediately required to fill up, not a few, very wide and unseemly gaps in the theological department, hitherto the most defective of all the departments, such as natural theology, christian evidences, the pastoral care, ecclesiastical history, and if I might presume to suggest an extension of this department, not less needed, or if happily supplemented, not less likely to become a very interesting and useful part of our system, a chair

for the noble subject of Christian missions, combining with it, a general view of the important lights which modern travels, and antiquarian researches, have shed forth, in our day, illustrative of the true meaning of the Scriptures, or of the fulfilment of prophecy? Surely all the other 99 eyes of our Committee must have been sealed, by some soporific touch, like that of the Caduceus of Mercury, when they could fasten the one only unsealed orb of sight, upon a part, which, if wanting, or even defective, must imply a heavy impeachment of him, whose office, without all question, it is to teach it; of this, we shall have ample proof, in the sequel; but even admitting, that it were a real, and not an imaginary desideratum, what theologian, or educationalist, will have the boldness, to tell us, that it is comparable, in importance, to any one of the ten desiderata which I have specified. Having cited a few of the most trustworthy testimonies, out of an indefinite multitude, that might easily have been adduced, I shall forever dismiss this part of my subject, after inquiring how far the opinion of the majority of the meeting of Committee—referred to—that logic should take precedence of psychology or a course of philosophy, as a suitable preparation for the study of the latter, is in point of fact, borne out, by the authority or example of the best judges, or accordant with the soundest principles of science, and of the art of education.

As to the value to be attached to the syllogistic logic, whether of Aristotle, or of the schoolmen, or of Oxford, and Archbishop Whateley, the question it seems to me, is one, so completely set at rest, by the most peremptory and unanimous decisions of such minds as Bacon, Locke, Reid, Stewart, and Campbell, that, it seems to me, like fighting with the dead, or slaying the slain, to re-discuss it. I would beg leave to refer my readers, and the majority of the Committee, more especially, to the whole of Dugald Stewart's second volume of *Elements of the Philosophy of Mind*, in which, he has in my conception, set the question for ever at rest, with all who have ever patiently and intelligently studied that invaluable portion of his works. I shall just content myself with the following extracts, recommending all who may take an interest in the question, to consult chap. III., section 2, of the 2nd volume of Stewart's *Elements*, Edinburgh Octavo Edition, 1816.

"The remarks which were long ago made by Lord Bacon, on the intility of the *syllogism*, as an organ of scientific discovery, to-

gether with the acute strictures in Locke's Essay on this form of reasoning, are so decisive in point of argument, and, at the same time, so familiarly known to all who turn their attention to philosophical enquiries, as to render it perfectly unnecessary for me on the present occasion, to add anything in support of them. I shall therefore in the sequel confine myself to a few very general and miscellaneous reflections, on one or two points, overlooked by these eminent writers, but to which it is of essential importance to attend, in order to estimate justly the value of the Aristotelian logic, considered as a branch of education.

"It is an observation which has been often repeated since Bacon's time, and which it is astonishing was so long in forcing itself on the notice of philosophers, that, in all our reasonings, about the established order of the universe, experience is our sole guide, and knowledge is to be acquired, only by ascending from particulars to generals; whereas the syllogism leads us invariably from universals to particulars, the truth of which, instead of being a *consequence* of the universal proposition, is *implied* and *presupposed* in the very terms of its enunciation. The syllogistic art, therefore, it has been justly concluded, can be of no use in extending our knowledge of nature. To this observation it may be added, that, if there are any parts of science, in which the syllogism can be advantageously applied, it must be those, where our judgments are formed, in consequence of an application to particular cases, of certain maxims which we are not at liberty to dispute. An example of this occurs in the practice of the law. Here the particular conclusion must be regulated by the general principle, whether right or wrong. The case was similar in every branch of philosophy, as long as the authority of great names prevailed, and the old scholastic maxims were allowed, without examination, to pass as incontrovertible truths. Since the importance of experiment and observation was fully understood, the syllogistic art has gradually fallen into contempt."—p. 284

"It is not, however, merely as a useless or inefficient organ for the discovery of truth, that this art is exceptionable. The importance of the very object at which it professedly aims, is not a little doubtful. To exercise with correctness the powers of deduction and of argumentation; or in other words, to make a legitimate inference from the premises before us, would seem to be an intellectual process, which requires but little assistance from rule. The

strongest evidence of this, is the facility with which men of the most moderate capacity learn, in the course of a few months, to comprehend the longest mathematical demonstrations,—a facility which, when contrasted with the difficulty of enlightening their minds, on questions of morals or of politics, affords a sufficient proof, that it is not from any inability to conduct a mere logical process, that our speculative errors arise. The fact is, that in most of the sciences, our reasonings consist of a very few steps; and yet how liable are the most cautious, and the most sagacious, to form erroneous conclusions!

“To enumerate and examine the causes of these false judgments, is foreign to my purpose in this section. The following (which I mention only by way of specimen) seem to be among the most powerful:—1st. The imperfections of language, both as an instrument of thought, and as a medium of philosophical communication. 2nd. The difficulty in many of our most important enquiries, of ascertaining the *facts* on which our reasoning are to proceed. 3rd. The partial and narrow views, which from want of information, or from some defect in our intellectual comprehension, we are apt to take of subjects, which are peculiarly complicated in their details, or which are connected, by numerous relations, with other questions equally problematical. And lastly (what is of all, perhaps, the most copious source of speculative error), the prejudices which authority and fashion, fortified by early impressions and associations, create to warp our opinions. To illustrate these and other circumstances by which the judgment is apt to be misled in the search of truth, and to point out the most effectual means of guarding against them, would form a very important article in a philosophical system of logic; but it is not on such subjects, that we are to expect information from the logic of Aristotle.”

“The fundamental idea on which this philosopher evidently proceeded, and in which he has been too implicitly followed by many, even of those who have rejected his syllogistic theory, takes for granted, that the discovery of truth chiefly depends on the reasoning faculty, and that it is the comparative strength of this faculty, which constitutes the intellectual superiority of one man above another. The similarity between the words *reason* and *reasoning*, of which I formerly took notice, and the confusion which it has occasioned in their appropriate meanings, has contributed powerfully

to encourage and to perpetuate this unfortunate mistake. "If I do not greatly deceive myself, it will be found, on an accurate examination of the subject, that, of the different elements which enter into the composition of *reason*, in the most enlarged acceptation of that word, the power of carrying on long processes of *reasoning* or *deduction* is, in point of importance, one of the least."—p. 288.

After illustrating and confirming these views, by reference to the history of those classes or professions, by whom the art of reasoning has been most cultivated—mathematicians—the schoolmen of the middle ages—the profession of law—controversial writers,—concluding this very interesting exemplification of the subject, with the singular case of the famous champion of Protestantism, Chillingworth, Stewart then proceeds to bear his testimony, not only against the form of the school logic, but even against the importance of the end to which it is directed.

"The foregoing observations, if well founded, conclude strongly, not merely against the *form* of the school logic, but against the importance of the *end* to which it is directed. Locke, and many others, have already shewn, how inadequate the syllogistic theory is to its avowed purpose; but few seem to be sufficiently aware, how very little this purpose, if it were attained, would advance us in the knowledge of those truths, which are the most interesting to human happiness.

"There is one species of madman," says Father Buffier, "that makes an excellent logician." The remark has the appearance of being somewhat paradoxical; but it is not without a solid foundation, both in fact and in the theory of the human understanding."—p. 295.

"For my own part, so little value does my individual experience lead me to place on argumentative address, when compared with some other endowments, subservient to our intellectual improvement, that I have long been accustomed to consider that promptness of reply, and dogmatism of decision, which mark the eager and practised disputant, as almost infallible symptoms of a limited capacity; a capacity deficient in what Locke has called (in very significant though somewhat homely terms) *large, sound, round about sense*. In all the higher endowments of the understanding, this intellectual quality (to which nature as well as education must liberally contribute) may be justly regarded as an essential ingre-

dent. It is this which, when cultivated by study, and directed to great objects or pursuits, produces an unprejudiced, comprehensive and efficient mind ; and, where it is wanting, though we may occasionally find a more than ordinary share of quickness and of information, a plausibility and brilliancy of discourse ; and that passive susceptibility of polish from the commerce of the world, which is so often united with imposing but secondary talents,—we may rest assured, that there exists a total incompetency for enlarged views and sagacious combinations, either in the researches of science or in the conduct of affairs.”—p. 298.

The following admirable remarks of Hallam, on the subject of Logic, are very much in harmony with my views:—

A living writer of high reputation (Dr. Whately), who has at least fully understood his own subject, and illustrated it better than his predecessors, from a more enlarged reading and thinking, wherein his own acuteness has been improved by the writers of the Baconian school, has been unfortunately instrumental, by the very merits of his treatise on Logic, in keeping up the prejudices on this subject, which have, generally, been deemed characteristic of the university to which he belonged. All the reflection I have been able to give to the subject, has convinced me of the *inefficacy* of the syllogistic art, in enabling us to think rightly for ourselves, or, which is part of thinking rightly, in detecting those fallacies of others, which might impose on our understanding before we have acquired that art. It has been often alleged, and, as far as I can judge, with perfect truth, that no man, who can be worth answering ever commits, except through mere inadvertence, any paralogisms which the common logic serves to point out. It is easy enough to construct syllogisms which sin against its rules ; but the question is, by whom they were employed. It is not uncommon, as I am aware, to represent an adversary as reasoning illogically ; but this is generally effected by putting his argument into our own words. The great fault of all, over induction, or the assertion of a general premise, upon an insufficient examination of particulars, cannot be discovered or cured by any *logical* skill ; and this is the error into which men really fall, not that of omitting to *distribute the middle term*, though it comes in effect, and often in appearance, to the same thing. I do not contend that the rules of syllogism, which are very short and simple, ought not to be learned ; or that there may not be some advantage, in occasionally stating our own argument, or

calling upon another to state his, in a regular form (an advantage, however, rather dialectical, which is, in other words rhetorical, than one which affects the reasoning faculties): nor do I deny that it is philosophically worth while to know that all *general reasoning by words* may be reduced into syllogism, as it is to know that most of geometry may be resolved into the super-position of equal triangles; but to represent this portion of logical science as the whole, appears to me almost like teaching the scholar Euclid's Axioms, and the axiomatic theorem to which I have alluded, and calling this the science of geometry. The following passage, from the "Port Royal Logic," is very judicious and candid, giving as much to the Aristotelian system as it deserves:—"That part which we have now to treat, comprehending the rules of reasoning, is esteemed the most important in logic, and it is almost the only portion which is treated with care. But it may be doubted, whether its utility be not commonly over-rated. The errors of men, as we have already elsewhere remarked, are attributable much more to reasoning from false principles, than to reasoning falsely from just principles. It rarely happens, that men deceive themselves by speculations, which are false, only because the conclusions are falsely drawn; and, indeed, in this case, those who might be incapable of detecting the falsity by the *sole light of reason*, would be equally incapable of understanding the rules, which might be laid down, and still less of applying them. Nevertheless, when we consider these rules, as mere speculative truths, they will always serve to exercise the mind; and what is more, we cannot deny that they may be useful in some instances, and with respect to some persons, who, being naturally of a quick and penetrating genius, are apt to run into false conclusions, through inattention or inadvertency, which might have been prevented or obviated, by an acquaintance with these rules."

"How different is this sensible passage, from one quoted from some anonymous writer in Whately's Logic (p. 34):—"A fallacy consists of an ingenious mixture of truth and falsehood, so entangled, so intimately blended, that the fallacy is, in the chymical phrase, held in solution; *one drop of sound logic* is that test, which immediately disunites them, makes the foreign substance visible, and precipitates it to the bottom." One fallacy, it might be answered, as common as any, is the *false analogy*, the misleading the

mind by a comparison, where there is no real proportion or resemblance. The chymist's test is the *necessary* means of detecting the foreign substance; if the "drop of sound logic" be such, it is strange that lawyers, mathematicians, and mankind in general, should so sparingly employ it; the fact being notorious, that those most eminent, for strong reasoning powers, are rarely conversant with the syllogistic method. It is also well known, that these "intimately blended mixtures of truth and falsehood" deceive no-man of plain sense. So much for the *test*."—See Hallam's Works, vol. ii. note to p. 87, New York edition, 1847.

So much, then, for the estimation in which the science of Logic, —properly, or improperly, called such—as it has been defined and expounded by its mighty father, Aristotle, or its ablest modern champion, Whately is held; yea, even the very object of the science, of which its advocates are enamoured, is more than questioned,—it is absolutely condemned, and that in the strongest terms, by one of the most candid, and gentlest of critics and censors, Stewart.—With all this, it is quite possible, that its advocates may be right, but let them not, at least, plead the sanction of the great names of Reid, Stewart, Campbell, or Beattie, or of the still greater names of Bacon and Locke, who, in point of fact, stand forth in the attitude of the most unequivocal antagonism to their views, and have emphatically denounced it, as worse than useless,—as tending to form habits of mind, entirely adverse to the best and highest ends and influences of a liberal education. I might well content myself to cut short the discussion of the subject *here*, leaving my opinion to rest upon the simple authority of such names. But I would just like, in a cause so important and in a crisis of our College so perilous, with the weight of the authorities at head quarters opposed to me, just to try the effect of the *argumentum ad hominem*, appealing to the shrewd judgment and feeling experience of my excellent colleagues and brethren in the committee, in whose system of practical logic, however far it may otherwise differ from my own, I cannot doubt that the *very practical evidence* of the testimony of their own observation and experience, must hold a place of equally high confidence and honor, as in mine it does. "Have ye never, dear Brethren, fallen in evil hour, into the hands of some mighty Nimrod, or Goliath of logic, or to fit him perhaps with a more appropriate appellation, some wild Ishmael man of debate? Have

ye never felt, to your cost, in the exhaustion of your largest patience, in the exacerbation of your sweetest temper, and the more than slight disturbance of all your meekness of wisdom, how widely, as the poles asunder, are *the reasoning man, and the reasonable man*? Has it been your rare and enviable privilege, my thrice happy Brothers, never to have looked on, with affrighted eyes, or ruefully elongated visages, while a Reverend Presbytery, or a venerable Synod, caught in the wordy tempest of some Forensic Boreas, or Theological Boanerges, long, loud and fierce, the opening of whose mouth, like that of the cave of Eolus, is the signal for the eruption of all the winds; whose rising up, in the committee room, or council chamber, is like that of Orion, or the sad genius of the coming storm, or winter howling with all his blasts? Have ye never witnessed the chaos of confusion,—the wild war of elements, like the ocean wrought into a storm, while the only one who rides calm and serene on the blast, is just the very man who raised all this hurley-burley, and, like the bird of storm, riots and revels therein with wanton wing,—delighting to play the champion of either side, or of neither side of the question; equally eloquent on a Ribbon or a Raphael; whose artillery of arguments, like an exhaustless magazine of the weapons of war, never fails; they grow as fast as did the heads of the fabled Hydra, under the sword of Hercules,—who, even when vanquished, can argue still, as well *without*, as *with* an object, an aim, a subject, in defiance of the old adage "*ex nihilo nihil fit*,"—in fine, who rises more terrible, after every fall, and whose thunders, even when they carry no bolts, are terrible in the rolling fury of their reverberated echoes, and in the flashing splendors, from which the eye recoils? Have you never retired from such a scene with a sensation, not much unlike that of the Emigrant, in his first voyage, when, taken with the sea sickness, he comes down, more dead than alive, from the deck of the ship, wan and woe-begone, as if his heart had died within him? Have you never, in *propria persona*, encountered in some high debate, academical or ecclesiastical, such an one, who comes upon you, with as many a hundred horse power of logic, as one of our biggest, blackest, boldest, transatlantic steam frigates; or like one of the ancient knights of chivalry in a grand tournament, sheathed in iron panoply, armed to the very teeth? Have you never been thus set upon; in the same style, as when the opium-eater, under

the maddening influence of his fatal drug, is said to *run a muck*, and having barely escaped with your life, vowed never again to approach to the perilous edge of such battle, never again to "tempt the imminent deadly breach" of such a hazard; and, after such lessoning of that experience, which, if the common proverb doth not lie, teacheth fools, are ye in sober earnest, are ye in your sane minds, when with all the gravity and deliberation of legislators of education, and guides of youth, ye decree to set up a class of Practical Logick, to be a nursery to breed and train up, to propagate and perpetuate, in this now peaceable and happy land, such a *genus invisum* as I have described, your own experience being at once the witness and the judge?

I hope, I am not alone, in my judgment, that it is, most desirable for the peace and prosperity of the church, and of the land, that we leave the race to die out quietly, in the course of nature, whose decree,—first promulgated, at the memorable epoch of the invention of the art of printing, and the revival of learning, has doomed to speedy oblivion, this and other remnants of ancient barbarism.—The decree is long gone forth, that the days of Abelard, and Duns Scotus, those palmy days of logic and scholasticism, of monkery and superstition, shall give place for ever, to the golden age of civilization and christianity, henceforth, in blessed and indissoluble union, "to run, and have free course, and be glorified." Let us not, then, be found vainly fighting against the course of nature, and of civilization. Deem not that this very ambiguous science is the *elixir of life*, in philosophy, or the very "*sic itur ad astra*," of theology. If ye are fallen in love with the character and accomplishments of a practised debater, of a thorough-bred dialectician; if your experience has led you to a conclusion, so different from mine, as that the favorite weapons of warfare, in which monks and priests delight as their proper accoutrement or panoply of war, to which the Oxford champions of Puseyism, want to carry back their country and their church, that they may revive errors and corruptions of "blackest midnight born;" if ye have determined to make all haste, to convert our peaceful college into a palestra of forensic warfare, to waken all its slumbering echoes—to respond to the din and discord of scholastic debate; to make it a camp, for the entertainment and training of a host of polemical theologists,—I have nothing to say, —I can only wonder in silence, and weep in secret, for such infatuation!

I would entreat the advocates of this measure, to consider well, what they mean or intend by this logic class. Is it the Aristotelian logic? Then, I say, be consistent and complete your design, perfect your work, combine with it the *ontology* and *metaphysics* of Aristotle, and you will have the "old drowsy shop" restored and in full blow. You will repudiate disdainfully, I doubt not, the imputation of such a purpose. But if you say, as in this case ye must, that Whately's reformed system, is to be your choice; I contend, that it is substantially one and the same with that of Aristotle. What value it has, as a science, we have already seen and established, by manifold and weighty authority. As a branch of education, I would, for my own part prefer, on many strong grounds, though of a negative kind, the scholastic science of *Angelography*.* It were worthier of our patronage, for it would certainly involve less hazard of doing harm to the minds of our students. If, in the third and only remaining view of the subject, which it seems possible to imagine, you profess to hold with the whole Scottish school of philosophy, and Bacon, and Locke, at their head, that the syllogistic logic is useless, nay, a worse than useless study, except it may be, as a matter of curiosity, or as a singular phenomenon in the history of man, we bring you at length, to the very conclusion for which we have, these two or three years, been doing battle, that the best, and indeed the only valuable materials, towards the forming of a true and legitimate science of logic, are to be found, as yet, only in the pages of our great psychologists, and cannot be said, in fact, to have been wrought up into the form or completeness, or to have assumed the name of a recognised science. "I should wish," says Stewart, in the opening of the second volume of his elements, in which the subject of logic finds its proper place, "in particular, to contribute something more, than I can here introduce towards a rational and practical system of logic, adapted to the present state of human knowledge, and to the real business of human life."

"Few defects, on the contrary," says Hallam, "in our system of education, are more visible than the want of an adequate course of logic; and this is not likely to be rectified, so long as the Aristotelian methods challenge that denomination, exclusively of all other aids, to the reasoning faculties. The position that nothing else is to be called logic, were it even agreeable to the derivation of the word,

* The doctrine of Angels, a branch of Medieval Science, so called.

which it is not, or to the usage of the ancients, which is by no means uniformly the case, or to that of modern philosophy and correct language, which is certainly not at all the case, is no answer to the question, whether what we call logic, does not deserve to be taught at all."—See Hallam's works, vol. II., note p. 87.

What principle is taught, what term is defined in Taylor's or Whately's elements, that is not more fully and scientifically explained, defined, its very elements and essence developed, in the works of Reid, Stewart, Abercrombie, which are our manuals? And I just request any competent judge to open the last mentioned, and they will, no doubt, be surprised to find how much superior, in all respects, is the summary of logic in this little volume, on the intellectual powers, to those commended in the printed letter.

Granting, then, unreservedly, all that its warmest advocates can claim for logic, as a branch of either science or education, why, I demand, should it be torn, thus barbarously and wantonly, out of its place and order, in the living system? Why dismember and mutilate the body of science, destroy its symmetry, dissolve its vital unity, exhibiting it like an amputated limb, or a lifeless branch,—a merely empirical science,—a body without a soul?

But, I go farther still—I contend that this wanton disruption of unity, scientific, and educational, will not be atoned for or compensated, by any increase of solid or wholesome fruit. This innovation, justly so named, will not help but hinder, will not mend but mar our working; so far from furthering, facilitating, and expediting our work, it will embarrass, distract, and cause it to retrograde. I will engage to teach those students who, last session, attended my junior class of philosophy, more of practical logic—I must be understood—of a sound and legitimate character, in the first month of next session, than, I believe possible to be done, in six, or in twelve months, or indeed, any length of time, with students, who are not properly grounded in psychology; and let the experiment be tried when it may, I unhesitatingly foretell that it will, and must turn out a miserable failure, to the utter disappointment of the fond hopes of the professor who undertakes it, and misapplication of the time and labour, of the misdirected students. In predicting all this failure, I intend no imputation upon the ability or industry of either the teacher or the taught. Admitting that many excellent truths might be excellently well delivered, and in part comprehended and

retained—I still insist, that the science, as a whole, could not thus be taught to purpose, because, the method being radically vitious, would more than counterbalance, by its pervading influence, any possible amount of partial benefit. I may be asked, whence is this bold confidence, with which, you hazard the ill-omened prediction, of the miscarriage of an experiment, before it is tried? I answer, that my confidence is justified, on the very same grounds, as would be that of him, who should, *a priori*, decide that the mere knowledge of practical navigation; would not enable a man to calculate eclipses; nor the greatest practical expertness, in performing arithmetical questions, in the rule-of-three give the least insight into the scientific truths demonstrated in the fifth book of the Elements of Euclid. But, while I must contend, that this experiment, if tried, will certainly issue in ultimate disappointment, let it not be forgotten, that it will cost us very dear—not less than the double waste of the time, talents, and strength, of the professor, and of the students; and I would just put it to the good sense of the patrons of this new project, whether,—if logic, in its legitimate order, falls properly, within the province of the science of psychology, and has, in fact, better justice done to it, in this view, in the works of the Scottish philosophers, to which we seem all to be appealing, as our masters and guides,—it must not be the fault of the professor, who has been called to take charge of this department, either through neglect and omission of his duty, or a want of judgment and ability in the execution of his trust, if that part be really found defective? Whatever may have been the cause,—negligence or inability—my decided conclusion is, that the only proper course on the part of the church, dictated by every consideration of wisdom and economy, in the management of concerns of such paramount interest, is to appoint, without hesitation or delay, some one to fill the chair of mental and moral philosophy, competent for the task, and not to distract and overburden the professor of divinity, whose field of labour is already too extensive, and, certainly, too important to admit of our imposing upon him, the supernumerary charge of a class of secular science.

I now hasten to wind up this second part of my statement, with a few suggestions and remarks, relative to the direction of the whole educational process, and the distribution and combination of the studies, referring my reader to the tabular view, and the accompanying

exposition of its plan and principles, inserted in the appendix.—(See Appendix note G.)

And, first of all, I should be disposed to regard the general direction of the reading, studies, and exercises of the students, as well during the recess, as the session of College, throughout the whole course of their education—whether preparatory or strictly professional—as the most important power, and involving the most weighty responsibility of our academical legislators and authorities. It has, I fear, been a capital error or oversight, hitherto, in the conduct of education, universally, that a power so important, and so capable of being exercised, with immense advantage, at all times, both to Teachers, and Scholars, economizing their time and labour, and while it imparts continuity, harmony and unity to the work, as a whole, rendering it more productive in its effects, and more comprehensive and commanding in its range, has been so little improved, indeed, I may add so little regarded, or at all taken into account. The following general idea of the true end of education, I quote from Stewart's Preliminary Dissertation to the Encyclopedia Britannica, intending it to serve as a motto, to the views brought forward in the statement. "The object of a Public Teacher is no longer, to inculcate a particular system of dogmas, but to prepare his pupils for exercising their own judgment, to exhibit to them an outline of the different sciences, and to suggest subjects for their future examination." Applying this universal canon, to our Theological school, I contend that it were vain, to estimate the merits of our College, by the test of branches nominally taught, or of prelections actually delivered from the Professorial Chairs. I have no faith, in the virtue of mere lecturing, if we do not follow it up and give it its perfect work, by subjecting the student to the habitual discipline of a catechetical process of examination, on the subject of each lecture; by frequent reviews of the system as a whole, in the connection of its parts and the unity of its plan; by directing him, in his private reading, reflection and exercises, specifying the books to be read at every stage, and expressly noting, for his guidance, and with a view to abridge his labour, and economize his precious time, the very chapters and sections which bear upon the immediate subject of the lecture. The great aim in education, without all question, is to direct, to animate the student, and, as the work can only be done to purpose, by his

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own energy in the right direction, and vigorous putting forth of his own powers, to point out to him the means and the manner in which he may work by and for himself, so as most effectually to co-operate with his instructors, towards the attainment of the common end. Following out these views, it would be necessary, to prescribe a judicious and at the same time compendious course of reading, corresponding with the course of academical lecturing, throughout the whole curriculum, including both the periods of session and recess, and uniting with this a co-ordinate series of written exercises, essays, abstracts, summaries of systems, books, &c.,—all graduated, according to the scale of the reading and lecturing,—all arranged, in systematic, scientific order, similar to that of the imperfect draught or specimen in the appendix.

I have attempted this sketch, rather as an illustration of my scheme, and by no means as a finished or perfect platform—the execution of which, I am well aware, would be the proper business of the Professors, as a Body, in conjunction with a Committee of Synod; and I should hope, so high is my estimate of the importance, at once, and the difficulty of the task, also in communication the while with the wisest and most experienced Heads and Fathers of the Free Church of Scotland.

In this way we should render the greatest service to the students by indicating to them, the most economical and effective method of prosecuting their work, so as if not greatly to amplify the amount of their reading, or the extent and variety of their knowledge,—a very interior consideration,—at least to save all that waste and squandering of time and labour, which are unavoidable, when the student is left to the blind guidance of his own inexperienced judgment, in the choice of his books or subjects of study; or as it commonly happens, yielding himself to the ease, inclination, fancy, or the caprice of the passing hour or day, finds, at the end of a whole recess, that he has lost, or trifled away, in desultory and unproductive pursuits, nine-tenths of his precious time. Now, from an examination of the greater part of our students, including the most advanced, of which the result is given in the appendix, it will be manifest, how much they would have been benefited, by an authoritative prescription, or even a simple recommendation by the Senate of the College, of a well digested scheme, or directory for the regulation of their private reading and studies. It seems easy for us, in this way,



not only to give greater efficiency to the working of our College, but by prolonging, throughout the whole year, nay, the whole extent of the Quinquennial Curriculum, that Educational Superintendence and authority, which have hitherto been circumscribed, in a great degree, within the limits of each half-yearly session, we should be enabled, by a judicious distribution of nearly one half of the studies and exercises, over the half yearly recess, to double the amount of work, usually done, just as, in some happy regions and climes, the favored inhabitants are privileged, by nature's bounty, to reap double harvests, from fields which are blessed with the annual succession of double springs and summers.

I think, I can perceive, in the wise exercise of this directive power, in the hands of the legislators and rulers of our college, the means of giving a far greater efficiency, to the working of our educational system, as well as of supplementing existing defects, and giving generally, a greater expansion and comprehensiveness, to the field of knowledge and science, in which our students might be enabled to expatiate,—in the event, especially, of the synod's adhibiting its sanction to the recommendation of the committee to extend the curriculum of study to a period of five years. Extending our view, through all the stages of this academical course, it is easy to be seen, that, under a judicious distribution of time and studies, in the classical, scientific, philosophical, and theological departments, and the prescription of suitable books—few, but of choicest quality—and exercises in writing to be prepared, chiefly, during the recess,—the students, with the order and the amount of the work to be done thus defined to them,—would gain an immense advantage, by having the best direction, in the prosecution of their studies; by the continuity and unity thus given to the whole course of their reading and exercises; and, most of all, perhaps, in the constant influence of such an authoritative enforcement of steady order and application, in the whole process of their education, stimulating, sustaining and regulating their own exertions.

The two hands, then, or grand organs of education, appear to me to be, first, *direction*, shewing how the work is best to be done, and secondly, *examinations*, frequent and strict, the only way of enforcing application, at once unexceptionable in its character, and powerful and uniform in its operation. The ancient inhabitants of the Balearides, in order to train their youth to be expert archers and

slingers, did not allow them any breakfast, before they had struck with an arrow a certain mark in a tree. Let our students well understand, that every new degree and step of advancement, in the course, must be earned—elaborated—must be a conquest won by their own industry and merits, not without the certainty of a reasonably strict, and not very remote probation; and we may rest assured, that it will beget and maintain a life and energy, in their working, which will make it more interesting and pleasing, as well as more productive of fruit. The nerves of attention and application, would thus be always duly braced. The fulness of intellectual life and activity, would be kept up, without any relaxation of the tone, through indolence, or carelessness,—while the uniform operation, of such a habitual and familiar incentive, would neither, by over exciting, nor by overstraining, impair the healthy condition and action of the mind. Thus reading, reflecting, writing, under a sense of his responsibility to a strictly impartial judgment, and with the desire, inseparable from every ingenuous mind, of not incurring censure or reproach, in such comparative trial of merit, a motive of the strongest kind would, by its constant operation, enforce upon him the necessity, as well as the duty, of thoroughly digesting all his knowledge, and striving to incorporate it with the very substance of the mind, as the only pledge and security, of an honorable issue to his trial.

It has always appeared to me that scarcely a tithe of all the fruit, from the reading of books, and hearing of lectures, and all manner of exercises, usually prescribed or gone through at schools and colleges, has been reaped, from the want of such a stimulus, sufficiently stringent and steady in its influence. In this respect, there can be no doubt, that the national system of education in Scotland, is still behind that of England, and would be greatly improved, if, to its own peculiar and manifold merits, it were to superadd the practice of periodical and searching examinations, with a suitable awarding of honorary distinctions, to those who might be approved. The actual efficacy, and admirable working, of this system, has been, indeed, well exemplified, in the case of the medical students. It is well known, with what vigor and devotedness, they are wont, almost without exception, to apply to their professional studies, preparatory to their examination by the Edinburgh College of Surgeons,—a vigor and devotedness—often wonderfully contrasting with

the listlessness and apathy which, in the ordinary routine and ineffective discipline of the mathematical and philosophical classes, were known to characterize their working.

In order to obtain a well framed directory, or platform, of Theological training, embracing the preparatory studies, as well as those strictly professional, the first aim should be, to determine the distribution, successive order, and simultaneous combination of the studies, so as to reduce them into the most perfect scientific order. Here, it seems to me, we have been most defective, and no deficiency could be more prejudicial to the success of our work. It is surely, of the last importance, in every view, to the work of education, to adhere strictly, to the natural order and sequence of the sciences, in the system of human knowledge. With what advantage does a youth, well grounded in English grammar, enter upon the study of ancient or modern languages, and with what pleasure to himself and to his teacher, does he commence Greek and Latin grammar, and the rudiments of classical literature? It is quite possible, to arrange all the stages and classes of this department, in a gently ascending scale or climax, leading the student, from the level of the simplest writers, Greek or Roman, by a series of natural and easy gradations, like the steps of a long ladder, so that before the close of such a curriculum as ours, he might be able to master the most obscure and difficult writers; thus resembling one, who, rising up by the successive steps of the ladder, climbs with as much ease, the last and highest of all, when taken in its proper time and place, as he did the first and lowest. It is in the want of such a graduation of the intellectual, or educational scale, and such a disposition of the parts, in the natural order of their easiness or difficulty; it is in the want of a good systematic collocation of the classical authors, founded on this principle, that so many are discouraged, in the study, especially, of the ancient languages, and neither enjoy pleasure in the prosecution of the work, nor, consequently, does one out of ten, who nominally study them, arrive at any proficiency.

From such a foundation of classical training, there is a natural and easy progressive ascent, through all the subsequent gradations of the intellectual scale. Dr. Beattie has an admirable essay on the value of an effective classical education, as a discipline, to prepare the mind for all the higher walks of philosophy and literature, — as the best practical logic, as the finest organ, that it is possible to devise,

for the perfect development and discipline of all our powers and faculties.* The legitimate order, then, is to pass immediately from the classics, into philosophy, mental and natural. With what advantage, and by what a natural transition, does the student, when he has been previously well trained in the physiology of mind, enter upon the study of logic and ethics, proceeding from the speculative to the practical. Called, in his onward career, to enter upon the branches of the philosophical classes, which are conterminous with, and in a manner, part and parcel of, theology,—after he has attained a due proficiency in the philosophy of Reid, and Stewart,—neither the profundity of thought, nor the obscurity of the style, of the writings of the great Butler, will prove any discouragement or obstruction to the student. Taking Butler's analogy and sermons, as the last and finishing part of the philosophical course, and dwelling upon this very essential part, until it is thoroughly digested, and the student's proficiency finally tested and approved, by a close and searching examination, is he not already, I ask, more than thoroughly furnished, for theology proper? Is he not, as it were, by anticipation, carried into the very heart and centre, of theological science? And how smooth, rapid, and delightful to himself and to his professor, will be his progress, through all the successive divisions—of this manifold, sublime science—systematical, exegetical, polemical, pastoral. What economy of time and labour would this scientific order of teaching produce;—how much difficulty and perplexity would the student escape,—how much more effective would the labours of teachers and taught, become! Nor, would it be the least advantage, of such a rational order and succession, of the constituent branches of our theological education, that while his progress became more smooth and pleasant, as he advanced, his light would be waxing brighter and brighter. His faith and piety, growing with the growth, and strengthening with the strength of his scientific knowledge of the christian system, and its evidences, would nerve his mind, with new strength and animate it with a zeal and devotedness, which would enrich him with the purest enjoyment and the most precious fruit. The beautiful unity and simplicity of truth, would be made manifest, when he thus realised that all the parts of science and sound knowledge are connected, as the stones of an

* See Dr. Beattie's *Essays on Poetry and Music*, &c.

arch, or rather, are vitally united, as the members of the living body.

Another important object, without which all the labour of education is, in a manner, lost, is, to form the students, to a *taste* for such studies as may be suitable to their views in life, and to establish, if possible, the *habit* of application, and, with it, a practical and familiar use of the best means and methods of study. What is the worth, let me ask, of all the lecturing and teaching in the world, during five or ten years, if the student go away at last, without any real love of letters—without any habits of order and application, formed and trained by the practical discipline of the College?—How little worth is all that the Classical or the Biblical Teacher can effect, if the student,—as too frequently happens—relinquishes all, or any of his College studies, just as soon as he takes his leave, at the end of the session, or of the course? And what better provision can we make, or what better security can we have, for the permanence of those habits, than that of extending our superintending care and authority throughout the recess,—prescribing, and practically enforcing suitable exercises, and taking a strict account of all the work which has been appointed to him? It is obvious that, in this way, we might supplement many of our deficiencies, and secure, at the end of the whole course, such a ripeness and proficiency, as it would be impossible to attain, in the five half yearly sessions, without thus including the recesses. The recess every year, would afford ample time for training of the student in the practice of composition, in English, as well as in the ancient languages; and he would not be exposed to the hurry and distraction incident to the session of College, but would have all the advantage of leisure, retirement, and a mind fresh and unworn by long confinement or severe application. Experience has shewn, that too much of this work is apt to withdraw the thoughts, attention, and interest of the student, during the session, from the subject of the classes and lectures; and the interruptions of the principal work, and the breaches thus caused in his application to it, are, by no means, made up by the slender amount of the compositions thus produced,—or the still more slender increase of improvement thereby gained, or which, in these circumstances, could be expected. It is during the recess that exercises in Rhetoric and Composition should be prepared—and it might be well to encourage and reward

the meritorious performance of such exercises, by suitable prizes or honorary distinctions each session.

Let me just advert to the important application that might be made of this suggestion, in regard to the most essential of all the branches of Theological Education, Biblical Criticism, and Exegetical Theology! Were it made a standing law, that all the students, without exception, or dispensation, should be bound to keep a record of their private reading and annotations—on the original scriptures,—on some portion of the Old and of the New Testament prescribed each year; and were this to be submitted, as a part of their probationary trials of examination, and the whole exhibited and reviewed at the end of the course, and the result entered as an essential element into their college certificates, there would be good hope of ultimate proficiency in a department, of which the importance cannot be over-estimated, and in which no progress of consequence can be made in any other way. How much, I ask, might be accomplished by such exercises—carried out without interruption—through a course of even three years; and how invaluable to the Church, would be the habits thus formed in her ministers?

Nothing can be so essential, in the conduct of education, as this selection, distribution, successive order, and systematic and scientific combination of all the constituent parts, for which we now plead. No time should be now lost, to give a systematic unity to our whole course. With such a well constructed system, it is possible without any great amount of learning, or even educational skill, in the teachers, to do much work—if not in the best style—with very considerable effect; while—let it be never forgotten—nothing whatever can compensate for an essential defect—a radical vice—in the plan or order of study.*

Should not our great aim be, in conformity with the definition of education by Stewart, to direct our students, how they may best

* Dr. Duff, in one of his late communications with regard to system and concentration in Missionary enterprise, thus refers, as confirmatory of his own, to the views of Mr. Douglas, of Cavem, published many years ago:—"A man," he remarks, "to whose philosophical acumen and penetrating insight into the great questions involved in the advancement of society in knowledge and religion, the world at large, has not done justice." Mr. Douglas states, "the first requisite in benevolent operations, as in all other undertakings, is system—a fixedness of design, and a steady adaptation of the means to the end." Every step gained in a system strengthens; every step gained without it weakens. The first object acquired leads to the possession of the second, and that to the attainment of the third, if all the objects to be obtained are originally chosen with reference to a plan.

carry out the work, by and for themselves? Is it not our best and greatest work, as teachers, to direct, stimulate, and sustain their own exertions, suffering them to rest, in nothing short of such a ready command and mastery of subjects, as may abide the test of severe and reiterated examinations? All of us, who take a candid retrospect of our own experience, of the time lost, or worse than lost in light, aimless, desultory, or ill-directed reading, irregular, unsteady, languid pursuit of solid and laudable studies, or even when, in reviewing the course of our literary life, we make an impartial estimate of the time and pains, which we have squandered, from inexperience and ignorance, of the right method—will be able abundantly to appreciate the importance of tracing out—for our students, the right course, and furnishing them, like travellers in a foreign land, with an approved itinerary or traveller's guide. I am doubtful whether there be any part of the work of teaching, more available, for the best advantage of the student, than that of just putting into his hand, a digest of studies, a selection of books, to be read or consulted, even descending to indicate to him, the most important chapters and sections, while, with the same view, it might be equally desirable to accompany this with a programme of the science; and in order to guide him to all that is most essential, in the subject-matter—to annex—in the systematic order, a well-digested set of queries to such programme. It is here, that our most proper and available power lies, as educationalists. We cannot be expected to make any approach to the immensely superior advantages of older colleges—British or American—in regard to the learning of the professors, the completeness of our libraries, scientific and literary equipments, or the division of labour and of the sciences, in teaching—but we may, without presumption, attempt to compete with them, in the discipline of our College; in the vigilance of our superintendence of the students, and of the work—*intramural and extramural*. Nay, more; we may easily improve upon the method or system of study, pursued in the old universities of Europe,—in many instances,—absurd or obsolete, and—in many more—far short of perfection. By subjecting our students to the habitual process of examination; exacting from them, oral or written answers to queries on the subjects of lecture or teaching; by prescribing them essays and exercises of various kinds in writing; by employing them much, in the most improving and profitable work of all, perhaps—in making

abstracts of lectures, sciences, systems, books, or the most valuable portions of books,—we have it completely in our power to task, to the uttermost, all their faculties—attention—memory—judgment—taste—reason,—and to fetch out all their intellectual energies and resources.

Give me a willing and earnest student, with a very slender stock of books, and with a proper grounding in grammar, English, Latin and Greek; let me have power and authority to direct the course of his studies, especially his reading, and the exercises above specified; and with these means, so simple in their nature, and cheap in their cost, I would have no hesitation, to challenge a comparison, between the results of teaching in Canada, with the average results, and perhaps with all, save the highest instances of genius or studious zeal, in the universities and great schools of the parent country. Proceeding upon this principle, in the classical department, I think that, in consequence of singular care from first to last, to make and keep the student familiar with his grammar, and in the small amount of his classical reading, enforcing the strictest practical application of grammatical rules—and the principles of derivation and composition—in every lesson—through every line—the result is such as warrants us to claim for the students as a body, the praise of more than the average proficiency of most of the colleges, as they were in my day in Scotland, or I believe, even now are. These students, let it be borne in mind, have many of them begun within the last three years, at the very foot of the scale,—several with *Carpenter* and *Lennie*, and more with the first rudiments of Greek and Latin,—and are at this moment reading the higher classics in both these languages, and have made no slight progress in Hebrew and Biblical Criticism; and if not proficient (who are?) in philosophy, logic, or theology, actually possess of such an endowment of all these, as some, perhaps many of us, their seniors, could not have equalled at the same age, under better culture.

I have now brought this statement to a close, and feel that I must defer at present, to enter into my proposed historical review of our College, intimate and important as is its bearing upon the questions agitated, relative to our educational system. I find, in fact, that I am not yet in possession of all the materials requisite to enable me to do justice to so interesting a subject, and in the mean time, reserving this part for the pages of the Record, it becomes me, per-

haps, rather to crave the indulgence of my Brethren and Readers, generally, for the degree in which, I fear, I have already tasked their patience. I have endeavoured, not without counting the cost, after a long and anxious weighing in my own mind, of what is due in such a crisis, first and chiefly to God and to the cause, and next, to my colleagues and myself—frankly, faithfully, and unreservedly, to bring out my views, under a sincere conviction of the paramount importance of the interests which are at stake, and not even to dissemble or extenuate the feelings, more of sorrow than of anger, with which I regard the resolution of my colleagues, to get up a class of practical logic, of more than dubious utility, instead of carrying into effect the establishment of a professorship of classical literature, following out the terms of our instruction to Mr. Bayne; and by a wise and well-timed, and indubitable improvement of our College, advancing its prosperity, extending its usefulness, and ensuring its permanent efficiency and success. I am deeply impressed with a sense of the many excellencies and accomplishments, worthy of all love and honor, which distinguish the characters of these Brethren; and should exceedingly wrong them if, while I bow with unaffected humility to their superior excellence, in many respects, I did not acknowledge their zeal and devotedness to the cause, at least, as pure and fervent as my own; yet I trust, I may at least escape the censure of presumption, if I have appeared, on this occasion, somewhat confident in my own views, as opposed to the weight of their united judgment, since the greater part of my life has been given to the study, and the practice of education, both as a science and an art; and whether I may be right or wrong in this instance, let others judge.—I can truly say, that it is with much pain and reluctance, that I have constrained myself to fulfil an arduous, ungrateful office—without profit or pleasure,—with the all but certainty of offending my friends, and with no other compensation than the simple consciousness, that this very ungracious task ought to be done by some one.

To sum up, therefore, in few words, what in my humble judgment, should be the course of procedure in order to place our College on a right footing—at least out of the imminent peril in which I believe it now stands, let the Synod, following out the instructions given under their authority to Mr. Bayne, last year, resolve that a Professor, duly qualified for the classical department, shall, with

the least possible delay, be added forthwith to the existing staff of the College. With this seasonable addition to our establishment, I feel a strong confidence, that our efficiency would be such as to enable us to maintain all the ground that we have already won—and even to extend it, so as to make the academy self-sustaining, and to give the College a fast and permanent hold of the confidence and patronage of the community. If this is not done, and that too promptly, I foresee that the inevitable, if not rapid decline of the Academy, will pave the way for the subsequent and not very distant diminution, both of students, patrons, and funds, to the higher Institution, which must draw the very life blood of its prosperity from this fountain. No ability, no zeal, or straining on the part of the Professors of Theology, Biblical Literature and Philosophy, will be able to compensate this want of solidity and strength at the foundation,—this defect of vitality and vigor at the very root.—Unless we are prepared to hope against reason, and the nature of things, and to look for success where there is not, cannot be, efficiency of working,—unless we attempt the practical contradiction of building without a foundation, we cannot be blind to the inevitable futility and abortiveness of all other Educational apparatus and provision, if there be an essential deficiency of the prime element of all literature—sacred and profane. Could we form philosophers and theologians, without this element, what would they in fact be, intellectually considered, but half men? A Theologian, but not a scholar, is almost a contradiction in terms; nor is it much better in respect to the Philosopher, especially the moral Philosopher. The one half of the culture and accomplishment of the human mind, and that not the least essential to the complete constitution of the philosopher and divine, would be left a blank—a void. Since these things are so with us, I would fain learn of the majority of our committee, what course they contemplate next session, in regard to the conduct of the classical department. Is it to be discarded altogether? Has Mr. Gale time to spare, even if, like myself, he should not shrink from undertaking a task, now become, in the case of the more advanced students, sufficiently arduous? Have ye thought of the necessary consequence of abandoning it altogether;—or what resource have ye in view, remedial or preventive? I cannot divine, but I fear, I tremble for the issue! It will be found a very short-sighted and

one-sided economy, if ye think to lighten thereby the pecuniary charge of either College or Academy ; or to relieve yourselves of a solemn responsibility, even in this mercantile and merely prudential view of your trust. And I would conclude, by recommending most respectfully to the Synod, that the whole subject of the constitution of the *scheme*, and of the conduct of the *work* of education, in Knox's College, should be submitted to a committee, composed of Ministers—holding no office in it—such as Messrs. McGillivray, Bayne, Stark, Reid, Hamilton, Leishman, Greig, or any others who may be equally competent to the task of drafting a model scheme of academical education, with instructions to advise with the Professors, especially, in regard to their respective departments, and then to communicate their matured scheme to the Professors of the Free Church College, Edinburgh, with the addition of Dr. Candlish and Mr. Begg, or any other individuals, equally able to counsel us wisely in this important matter, so that the Church in this land, may have the benefit of their suggestions and corrections, and that the work thus consummated, may, with such high sanction, command the fullest confidence, and be, as much as possible, secure thenceforth, from the danger of rash and ill-advised innovations.

It would be highly satisfactory to my mind, were such a course adopted ; and I have no fear that, were the business gone about with such wise caution, it would bring us at last to a happy issue, and also, to a no less happy unanimity. And now I have done,—and feel that I can do no more, with propriety, than leave this statement, and the whole question, to the final judgment and decision of the Church ; praying that her Divine Head may enlighten, direct, and overrule for his glory, the deliberations of the approaching meeting of our Synod.

APPENDIX.

NOTE A.

REASONS OF DISSENT.

Mr. Eason respectfully submits the following Reasons of Dissent, from the decision of the Committee of Knox's College, at the meeting held on the 21st inst.,—to institute a Course of Lectures on Practical Logic, distinct from, and in the view of the majority of said Committee, preparatory to the department of Mental and Moral Philosophy :—

I. First, because it appears to him, that logic is an integral part of psychology, and therefore comes, in the order of nature and of science, immediately after the analysis of the operations of the mind, or what is denominated by Brown, in reference to the analogy of physical science, the physiology of the mind.

II. Because, such a separate course of practical logic is, if this view be just, utterly superfluous, and must distract needlessly the attention, and misapply the time and labour of the lecturer and students, upon which, there are so many other immediate and urgent calls.

III. Because, if the appeal be made, either to the opinions and authority of the greatest masters, or to the most approved views of the theoretic principles of education, such an arrangement must be considered as unscientific and anomalous, mutilating the unity and integrity of our system of education, by dislocating one of the most essential of the practical branches of mental philosophy, from its natural and vital connection with the theory.

IV. Because, this derangement of the just order of our philosophical course, will operate very injuriously on the minds of the students, by engaging them, prematurely, in the study of one of the most important practical departments, without a previous and thorough grounding, in the scientific principles, on which all the rules of a sound logic depend. And it will be admitted, on all hands, that empirical knowledge and mechanical training, are altogether unworthy of, and incompatible with, the high and enlightened aims of our seminary.

V. Because, the example of the Glasgow university, alleged by the majority of the Committee, as the main argument for this anomalous arrangement, can be shewn, from the facts of the case, to have no manner of application, as the class of practical logic in that university, was not suggested or instituted, by any sense of the need or expediency of such a department, but was evidently forced, by public opinion, upon the Faculty, as the best and only substitute, that could be devised, to take the place of the Aristotelian or Scholastic Logic, which it was now felt necessary by all parties, to discard, as a relic of the dark ages, and as fitted only, to be the engine of false religion, and of science and philosophy, falsely so called, and, therefore, necessarily incompatible with either the order or the spirit and character of any rational or enlightened scheme of education. Had the question been, whether a new department of science should be introduced into the university, in room of the Aristotelian Logic and Ontology, there can be no doubt, that the enlightened legislators of that university, would have made choice of some science, not already comprehended in their course, but being evidently, shut up to the necessity of continuing the original name and character of the endowment, they naturally substituted a rational science, in the place of a spurious one.

VI. Mr. Essoy, begs leave, in conclusion, entirely to dissent from, and to enter his decided protest against the doctrine, that the European universities founded,—most of them—in the darkness of the middle ages, can be regarded as models for our imitation, serving rather, in his view, as beacons for our warning. Their original plan and constitution, were so vicious, that they scarcely admit of being mended.—They will in all probability, like many other institutions of more recent origin, have to be pulled down, and built anew, from the very foundation.—*Toronto, May 24th, 1848.*

Since I drew up these Reasons of Dissent, I have found most authentic and ample evidence of the correctness of my views, as express in them, which I herewith subjoin. The unphilosophical and truly preposterous collocation of the different Branches of Philosophy and Science, which formerly obtained in all our Scotch Universities, and is still continued in three out of the five, underwent a happy reformation in those of Aberdeen, under the auspices of Dr. Alex. Gerrard, as the following extract from the account of his life, in "*Chambers' Scottish Biography*," will shew:—

"At the period when Mr. Gerard was appointed to a chair in Marischal college, the philosophical curriculum, commencing with logic, proceeded immediately to the abstract subjects of ontology and pneumatics, the course gradually decreasing in abstractness with the consideration of morals and politics, and terminating with the more definite and practical doctrines of natural philosophy. Through the whole of this varied course it was the duty of each individual to lead his pupils; mathematics and Greek being alone taught by separate professors. The evils of this system suggested to the professors of Marischal college, the formation of a plan for the radical alteration of the routine, which has since been most beneficially conducive to the progress of Scottish literature. A very curious and now rare pamphlet, from the pen of Dr. Gerard, exists on this subject; it is entitled, "*Plan of Education in the Marischal College and University of Aberdeen, with the Reasons of it, drawn up by order of the Faculty*," printed at Aberdeen in 1755; a little work of admirable perspicuity and sound logical reasoning. The rationale of the ancient system was founded on the presumption, that, as it is by the use of logic and the other metaphysical sciences alone, that we can arrange, digest, and reason upon the facts which come under our observation, these must be committed to the mind as rules of management, before any facts collected can be applied to their proper purposes, and that before any knowledge of nature, as it exists, is stored in the intellect, that intellect must be previously possessed of certain regulations, to the criterion of which the knowledge gained must be submitted. A quotation from Dr. Gerard's little work will afford one of the best specimens of the now pretty generally understood confutation of this fallacy; speaking of logic, he says:—"This is one of the most abstruse and difficult branches of philosophy, and therefore quite improper to begin with. It has a strict dependence on many parts of knowledge: these must of consequence be premised, before it can be rightly apprehended,—the natural history of the human understanding must be known, and its phenomena discovered; for without this, the exertions of the intellectual faculties, and their application to the various subjects of science will be unintelligible. These phenomena must be not only ascertained, but likewise, as far as possible, explained; for without investigating their general laws, no certain and general conclusion concerning their exercise can be deduced: nay, all sciences, all branches of knowledge whatever, must be premised as a groundwork to genuine logic. History has one kind of evidence, mathematics another; natural philosophy, one still different; the philosophy of nature, another distinct from all these; the subordinate branches of these several parts, have still minuter peculiarities in the evidence appropriated to them. An unprejudiced mind will in each of these be convinced by that species of argument which is peculiar to it, though it does not select how it comes to be convinced. By being conversant in them, one is prepared for the study of logic; for they supply them with a fund of materials: in them the different kinds of evidence and argument are exemplified: from them

Only these illustrations can be taken, without which its rules and precepts would be unintelligible.' * * * 'In studying the particular sciences, reason will spontaneously exert itself: if the proper and natural method of reasoning is used, the mind will, by the native force of its faculties, perceive the evidence, and be convinced by it; though it does not reflect how this comes to pass, nor explicitly consider according to what general rules the understanding is exerted. By afterwards studying these rules, one will be farther fitted for prosecuting the several sciences, the knowledge of the grounds and laws of evidence will give him the security of reflection, against employing wrong methods of proof, and improper kinds of evidence, additional to that of *instinct* and *natural genius*.' The consequence of this acknowledgment of the supremacy of reason and practice, over argumentation and theory, was the establishment of a course of lectures on natural and civil history, previously to commencing the corresponding sciences of natural and mental philosophy; and that system, which, wherever the former part consists of anything better than blundering among explosive combustibles, and a clattering among glass vessels, the latter is anything superior to a circumstantial narrative of ancient falsehoods, and modern dates,—the student derives a tissue of sound and useful information, in which the more metaphysical sciences may or may not be built, as circumstances or inclination admit. It is a striking instance of the propensity to follow with accuracy the beaten track, or to deviate only when some powerful spirit leads the way, that the system has never advanced further than as laid down by Dr. Gerard;—according to his system, jurisprudence and politics are to be preceded by pneumatology and natural theology, and is to be mixed up 'with the perusal of some of the best ancient moralists.' Thus the studies of jurisprudence and politics, two sciences of strictly modern practical origin, are to be mixed with the dogmas of philosophers, who saw governments but in dreams, and calculated political contingencies in the abstract rules of mathematicians; and the British student finds, that the constitutional information, for which he will, at a more advanced period of life, discover that his country is renowned, is the only science from which the academical course has carefully excluded him, and which he is left to gather in after-life by desultory reading or miscellaneous conversation and practice. The change produced by Dr. Gerard was sufficiently sweeping as a first step, and the reasons for it were a sufficient victory for one mind over the stubbornness of ancient prejudice. It is to be also remembered, that those admirable constitutional works on the government and constitutional laws of England, (which have not even yet been imitated in Scotland,) and that new science, by which the resources of governments, and the relative powers of different forms of constitutions are made known like the circumstances of a private individual—the work of an illustrious Scotsman—had not then appeared. It will be for some approaching age to improve this admirable plan; and to place those sciences which great of men—in the methods by which, as divided in different clusters through the earth, they have reduced abstract principles of morals to practice—as an intermediate exercise betwixt the acquisition of mere physical facts, and the study of those sciences which embrace an abstract speculation on these facts; keeping the mind chained as long as possible to things which exist in the world, in morals as well as in facts,—the example of the tyrannical system never departed from till the days of Bacon and Des Cartes—and of many reasonings of the present day, which it might be presumption to call absurd, showing us how naturally the mind indulges itself in erecting abstract edifices, out of proportions which are useless when they are reduced to the criterion of practice."

I have been induced to give this long extract that I may evince how little worthy to be models for our guidance, are the majority of these institutions, founded as they were in the middle ages, and still retaining "*multa prius vestigia ruris*."

The following extract from the life of Dr. Jardine, in the same work, will shew that though the old prescriptive name, Logic Class, has been retained; the proper subject or business of the class, is Rhetoric. The account here given of the subject matter of Dr. Jardine's teaching, shews that nothing can be imagined

more unlike the scheme of the practical logic by Dr. Burns, confounding as the latter does, all the boundaries and distinctions of physical and metaphysical science, dissolving the vital union of the speculative and practical parts, divorcing the art from its parent science, and taking such an indefinite and interminable range, as, in fact, to embrace the *omne scibile*, for what less can be the measure of the field of a lecturer, who is to make "the theory of world building," as well as "the theory of ideas," yea, and theories moral and metaphysical, universally, "soon to fall before the lessons and the inductive processes of an exact logic." A marvellous achievement verily for a single-handed logic, with no more aid than that of a little finger of metaphysics or psychology!

Indeed it is evident, that Dr. Burns has been misled by the name of logic class, and has schemed a new and somewhat heterodite school, by a kind of Mrs. Malaprop blunder! The admirable improvement, in the method of instruction by examinations is just an imitation of the long established practice of the Aberdeen Colleges, and what I have always endeavoured, in its general spirit and principles, to follow, in my classes of Philosophy, as well as I could, or as circumstances would admit:—

"Mr. Jardine soon perceived, therefore, the necessity of a thorough and radical change on the subjects of his lectures, and after a simple analysis of the different powers of the understanding, with the means of their improvement, accompanied with a short account of Aristotle's logic, he devoted by far the greater part of the course to the original progress of language; the principles of general grammar; the elements of taste and criticism; and to the rules of composition, with a view to the promotion of a correct style, illustrated by examples. His course of lectures was, accordingly, entirely new-modelled, and he soon found that a great proportion of the students entered with awakened interest upon the consideration of these subjects, instead of the listless inattention which had been bestowed on the abstract doctrines of metaphysics. But the greatest improvement which he introduced into the mode of conducting the business of the class, was a regular system of examination and exercises. He was of opinion with Dr Barrow, that communication of truth is only one half of the business of education, and is not even the most important half. The most important is the habit of employing, to some good purpose, the acquisitions of memory by the exercise of the understanding; and till this be acquired, the acquisition will not be found of much use. The mere delivery of a lecture, especially to very young persons, he held of very little advantage, unless they were placed in the situation of those who were bound to give an account of it; and the exposition of the rules of composition to be of little avail, unless accompanied by the application of those rules to the student himself. Accordingly, at a separate hour in the forenoon, the students were examined each day on the lecture of the morning, and written essays were required from time to time on subjects more or less connected with those embraced in the lectures."

This note (A.) has reference to the remarks and reasonings in my statement, beginning at page 32, and extending to page 49.

NOTE B.

Extract from Dr. Reid's Essays.

The following extract, given at length from Dr. Reid's *Essays on the Intellectual Powers of Man*, seems to me to shed a strong light on the true fundamental principles of a sound Logic as well as of a sound Rhetoric. The paragraphs which appear to bear me out in the views which I have expressed generally in the body of my statement, are printed in Italics, that they may attract the more attentive regard of the reader:—

"Our conceptions of things may be clear, distinct, and steady; or they may be obscure, indistinct, and wavering. The liveliness of our conceptions gives pleasure, but it is their distinctness and steadiness that enables us to judge justly, and to express our sentiments with perspicuity.

"If we enquire into the cause, why among persons speaking or writing on the same subject, we find in one so much darkness, in another so much perspicuity, I believe the chief cause will be found to be, that one had a distinct and steady conception of what he said or wrote, and the other had not: Men generally find means to express distinctly what they have conceived distinctly. Horace observes that proper words spontaneously follow distinct conceptions. '*Verbaque provisam rem non invita sequuntur.*' But it is impossible that a man should distinctly express what he has not distinctly conceived.

"We are commonly taught that perspicuity depends upon a proper choice of words, a proper structure of sentences, and a proper order in the whole composition. All this is very true, but it supposes distinctness in our conceptions, without which there can be neither propriety in our words, nor in the structure of our sentences, nor in our method. Nay, I apprehend, that indistinct conceptions of things are, for the most part, the cause not only of obscurity in writing and speaking, but of error in judging. Must not they who conceive things in the same manner, form the same judgments of their agreements and disagreements? Is it possible for two persons to differ with regard to the conclusion of a syllogism, who have the same conception of the premises?

"Some persons find it difficult to enter into a mathematical demonstration: I believe we shall always find the reason to be, that they do not distinctly apprehend it. A man cannot be convinced by what he does not understand. On the other hand, I think a man cannot understand a demonstration without seeing the force of it. I speak of such demonstrations as those of Euclid, where every step is set down, and nothing left to be supplied by the reader.

"Sometimes one who has got through the first four books of Euclid's Elements and sees the force of the demonstrations, finds difficulty in the fifth. What is the reason of this? You may find, by a little conversation with him, that he has not a clear and steady conception of ratios and of the terms relating to them. When the terms used in the fifth book have become familiar, and readily excite in his mind a clear and steady conception of their meaning, you may venture to affirm that he will be able to understand the demonstrations of that book, and to see the force of them.

"If this be really the case, as it seems to be, it leads us to think that men are very much upon a level with regard to mere judgment, when we take that faculty apart from the apprehension or conception of things about which we judge; so that a sound judgment seems to be the inseparable companion of a clear and steady apprehension: And we ought not to consider these two as talents, of which the one may fall to the lot of one man, and the other to the lot of another, but as talents which always go together.

"It may, however, be observed, that some of our conceptions may be more subservient to reasoning than others which are equally clear and distinct. It was before observed, that some of our conceptions are of individual things, others of things general and abstract. It may happen, that a man who has very clear conceptions of things individual, is not so happy in those of things general and abstract. And this I take to be the reason why we find men who have good judgment in matters of common life, and perhaps good talents for poetical or rhetorical composition, who would find it very difficult to enter into abstract reasoning.

"That I may not appear singular in putting men so much upon a level in point of mere judgment, I beg leave to support this opinion by the authority of two very thinking men, Des Cartes and Cicero. The former, in his Dissertation on Method, expresses himself to this purpose: 'Nothing is so equally distributed among men as judgment. Wherefore it seems reasonable to believe, that the power of distinguishing what is true from what is false, (which we properly call judgment or right reasoning), is by nature equal in all men: and therefore that the diversity of our opinions does not arise from one person being endowed with

a greater power of reason than another, but only from this, that we do not lead our thoughts in the same tract, nor attend to the same things.

"Cicero, in his third book *De Oratore*, makes this observation. 'It is wonderful, when the learned and unlearned differ so much in art, how little they differ in judgment. For art being derived from nature, is good for nothing, unless it move and delight nature.'

"From what has been said in this article, it follows, that it is so far in our power to write and speak perspicuously, and to reason justly, as it is in our power to form clear and distinct conceptions of the subject on which we speak or reason. And though nature hath put a wide difference between one man and another in this respect, yet that it is in a very considerable degree in our power to have clear and distinct apprehensions of things about which we think and reason, cannot be doubted."

If we admit the truth of Dr. Reid's views, in this passage, it must follow, by clear logical inference, that so far as pertains to the knowledge or the use of language, or in other words, so far as either Logic or Rhetoric—of both which, language is the subject—is concerned, the analysis and definition of words, as the signs of our conceptions, must be the very foundation of our educational system of discipline, if we would conduct it on sound and scientific principles. Is it not almost a self-evident truth that any attempt to teach the art of composition and the various elements of higher Rhetoric, which constitute the graces and ornaments, of style, sentiment, and elocution, is altogether premature and out of the order of nature and of the mind, while the learner is not yet master of the meaning and spirit of single words or phrases or idioms; or, in other words, is ignorant of the nature and qualities of the very materials to be constructed and co-adjusted, so as to result, in all the graceful harmonious propositions of well formed periods and finished compositions, calculated to fulfil the ends of instructing, convincing, persuading and delighting the readers or the hearers? Does it not seem a preposterous labour to teach the art of giving the best form and structure of sentences and discourses to a youth who could not define, without blundering at every step, the words, which are the materials he is called to work upon, and to put together, as if he knew their qualities of fitness or unfitness; as if he were not ignorant of their meaning, and therefore of their use and application? This easily accounts for all the abortiveness of the common methods that have been followed hitherto in teaching Composition and Rhetoric.

This attempt must necessarily prove worse than a failure, as all perverse and sophistical arts do, until the learner is first thoroughly trained to the definition of things as well as words; the teacher blending into happy union, these two kindred and essentially related exercises.

Such a happy alliance, between what I may call, the grammatical analysis of thought and the grammar of language, or as we might otherwise express it, the union of intellectual or psychological parsing, with etymological and syntactical, would, in my judgment, do more for Rhetoric, Logic, and all that is useful to form a good reasoner or eloquent writer, than has yet been—I do not say, actually realised—but even attempted or conceived; and would it not be as easy, in teaching modern or ancient languages, to do all this, at one and the same time, as not? Nay, would not the combination of these two exercises facilitate the work, and make it at once more pleasant and more perfect, by uniting the soul with the body; by studying and analysing, by scanning and comparing—simultaneously and in apposition—lan-

gnage, the instrument—and thought, the matter of the subject? “The Elements of Rhetoric,” as Dr. Beattie has justly remarked, “should always be taught in conjunction with those of Grammar. The former would make the latter more entertaining; and by setting the various parts of language, in a new light, would give rise to new energies in the mind of the student, and prepare him for relishing the beauties and practising the rules of good writing, thus heightening the pleasure of study with little or no increase of labour.” The rules, he adds, “for applying the elegancies of language, being founded in the science of human nature, must gradually lead the young rhetorician to attend to what passes in his own mind; which, of all the scenes of human observation, is the most important, and, in the early part of life, the least attended to.” See Dr. Beattie’s admirable Essay on Classical Learning.

It is the opinion of Locke,—certainly the best judge of such a question—that the differences of opinion in the world, are, for the most part, not real; do not touch or affect the things themselves about which we contend, but are merely verbal, and arise out of the imperfection and abuse of words. In fact Locke and Bacon, together with all the great philosophers of the Scottish school, concur in ascribing almost all our differences of opinion, all our intellectual, and especially our philosophical difficulties and party divisions, to the insufficiency and intractableness of language, much more than to any real or intrinsic difficulty of the subjects.

The only proper, or indeed possible remedy for an evil—equally affecting the arts of Logic and Rhetoric—nay, its fatal influence reaching to the deepest roots and spreading through all the body and branches of the tree of knowledge, is that which I propose—namely, to combine, with the nominal definition and grammatical parsing of words, a concurrent or simultaneous exposition of the things which they denote, or of the ideas or conceptions of which words are merely arbitrary, and often far from unequivocal and faithful signs or representatives. On these grounds, and some others, which might easily be adduced from the most partial friends and ablest advocates of the cause, such as Dr. Whateley, and Dr. Arnold, I confess myself no great favourer of the common popular systems of Rhetoric and method of teaching Composition in our Schools and Colleges, to mere boys.

Grounding my opinion, on the high authority of Dr. Reid, and I may add, of Milton and Locke, I conclude that there is a more excellent way, that a practical discipline or preparatory training, such as I have suggested, would fulfil all, and more than all that is contemplated by the warmest admirers of practical Logic and practical Rhetoric. As to the philosophy of Rhetoric, on which there is just one, and, as I believe, as yet but one work, that of Campbell, (perhaps his masterpiece,) into which, any one who has looked—if competent to form a judgment—must know, that it derives its principles, laws, rules, from the very depths (penetralibus imis) of the philosophy of man, and, which is nearly the same thing, the philosophy of Taste or Criticism; in this view, taking its place by the side of Logic, as one of the chief practical Branches of the Philosophy of mind.

Dr. Burns' Letter on Knox's College, with Mr. Esson's Critique.

(PRINTED—NOT PUBLISHED.)

KNOX'S COLLEGE—PREPARATORY DEPARTMENT.

TORONTO, C. W., 23d March, 1848.

To the Members of the College Committee.

DEAR BRETHREN:

In the prospect of a meeting of the General Committee, in the month of April, there are some matters to which I wish to call your attention. It is desirable that your minds should be directed to these prior to your meeting, in order that any measure which may be proposed, may not be absolutely new to you. Such members as may not be able to attend, will be, perhaps, so good as to communicate their sentiments to me in writing, that I may ascertain, in some degree, the mind of the Committee, before submitting any measure. Of course, any proposal that may meet your views, will still require the sanction of the Synod; but such sanction may be counted on, provided only the Committee are unanimous, or pretty generally agreed. No other motive can be supposed to influence me beyond a wish to see an Institution, on which so much depends, properly organized, and successfully conducted. I have struggled now for more than two years, in forwarding certain measures, essential, as it appears to me, to the best interests of the College; and my want of success, hitherto, has led me to make a last effort in this more formal way, that the demands of conscience and of duty may be satisfied.

I. Too great facility in the admission of students, appears to me to be an evil which ought to be strenuously guarded against. Our Institution is peculiarly a Theological Seminary. Those young men who are admitted to its benefits, enter not on a general course of study which may ultimately bear on any professional object; they are received expressly as candidates for the ministry; and the Church, in receiving them as such, throws over each the shield of her patronage and encouragement. Hence the necessity of peculiar care in this matter. Not only ought we to be satisfied with regard to moral conduct, right motive, and apparent piety; there ought to be, in addition, some good evidence of a decided change of heart in the applicant. If this is not attended to, we need not expect to realize the true object of our union as a Church in these lands, the rearing up of a spiritual ministry, with a special view to the conversion of men to God. And then in regard to mental qualification and attainments in applicants, I am clearly of opinion that greater strictness than hitherto, is absolutely necessary; and that in this matter, as in the one just referred to, unanimity in the examining Committee, ought to be held as indispensable. A mere examination before a Presbytery, does not appear to me to be sufficient. A special Committee of Synod might be named for this purpose, or a sub-committee of the College Committee, who might act under strict regulations, and with power to treat with applicants in the way of conscientious advice, rather than judicially and on probative evidence. A certain measure of previous literary attainment ought to be required in every one who is to be received into the seminary. It does not appear to me that Knox's College ought to be considered as designed to furnish merely elementary instruction in the classics; and one design of the setting up of an Academy, certainly was, to supersede this, so as to retain on behalf of the College, its peculiar character as a training Seminary for the direct work of the ministry.

II. While I hold these views advisedly, and attach great importance to them, I am nevertheless of opinion, that even the students at College, as distinct from those of the Academy, stand in need of much more preparatory training than they have been in the habit of receiving. Here I use the terms, preparatory training, not in reference to further literary pursuits, but rather in reference to

studies peculiarly theological; and therefore, high as may be my hope of the indirect good to be derived from the institution of a preparatory school or Academy, I am very clearly of opinion, that an additional Professor in the department of mental training, or philosophical education, is essential to the success of our Seminary; and that under such an Institution our young men will be far more likely to realize the desired advantage in point of intellectual progress, than if mixed up with the pupils of a mere Academy, or subjected to the ordinary routine of a grammar school.

In the first place; the department of English literature, with a special view to the principles of composition, associated also with the rules of correct and graceful reading and elocution, ought not to be overlooked. A special exercise of this kind two or three times a week, would be highly advantageous; but to mix it up with any school-boy exercise, would defeat its end. It must be greatly mental. The young men of the College, and they only, should be its subjects; and they ought to view it as a part of philosophical training, far more closely connected than may appear at first sight with the more immediate objects of the Seminary. The disadvantages under which settlers in the provinces, in a literary view, labour, demonstrate the necessity of such exercises; while the age of the young men, and their general status, as to mental development, place them beyond the ordinary range of scholastic forms, and render a training specially for themselves, absolutely essential.

In the second place: Interesting and important as may be the prelections of a professor of mental and moral philosophy, it has always appeared to me very desirable that something of a character more directly practical and elementary—I mean in a philosophical sense—should be provided for the young men. For example, (1), a plain common-sense view of the powers and capacities of the human mind, with rules for their improvement. This has little in common with the speculations of metaphysics, or the more recondite parts of intellectual philosophy; but it may be highly advantageous as a preparation for such departments of human thought. (2). An exhibition of the nature of evidence, and the laws of its regulation. This is of very great importance in all pursuits; but its importance is mightily increased, when we take into view its bearing on the evidences of natural and revealed religion. (3). The laws of reasoning or logic proper—including of course, correct, but condensed views of the methods of syllogism and induction, with analysis and synthesis, and the rules of correct definition. I know not a better mental exercise, than an occasional examination on the “ambiguous words,” in Archbishop Whately’s Logic, or on the “definitions” in Taylor’s Elements of Thought. (4). The nature and sources of prejudice—the causes of error; the idols of Bacon, and the large tribe of fallacies in argument, present a wide, but most inviting field for young enquirers; and here the dangerous errors afloat among philosophers, as to the nature of causation, demand careful searching. Some of the most plausible and pernicious forms of modern scepticism may be traced to these errors. (5). The ideal theory ought to be explained to our students, not only in its older forms, as held by the ancients, and by such earlier moderns as Des Cartes, Malebranche, and Locke, but as recently revived by Dr. Thomas Brown and his admirers. The theory is, that the mind sees only images of its own creation or the representations of things without it, and not things themselves. This is the famous hypothesis out of which Bishop Berkeley formed his theory of the non-existence of a material world; and following out whose principles, Hume succeeded in satisfying himself that neither mind nor matter had any existence. The world is under infinite obligations to such men as Reid, Stewart, Campbell, Beattie, and others, who exposed the baselessness of the theory, and appealed successfully to primary principles of human belief, as ultimate facts in the arrangements of God. I tremble when I think of the readiness with which the exploded theory has been received; because I look upon it as not only destructive of all the evidence from final causes, in proof of the existence of God, but as directly subversive of all belief in the existence of any beings in the universe except ourselves. (6). Modern discoveries and speculations in Geology, render it essential that our young men should be informed on such subjects, so as to de-

test and expose the fallacies of such writers as the authors of the "Consolation of Man," and "The Vestiges of Creation," and such information may be communicated irrespective altogether of any peculiar tendency for the exercise. The theory of "world building," as well as the theory of "ideas," will soon fall before the lessons and the inductive process of an exact logic.

I wish it to be distinctly understood, that according to my conceptions of preparatory training, Knox's College is, in regard to the above matters, essentially defective; and my complaints on this account, for two years past, I do not feel ashamed to acknowledge. My brethren may deem them groundless, but as I ask is enquiry, and a fair tribunal for final judgment.

III. The remarks hitherto made respect the institution in its primary bearing only, but I attach to them great importance in any circumstances, and more especially in the present position of our young country, as contrasted with the advancing intellect of the age. It must not, however, be feared, that my objections are limited to the elementary or preliminary departments of study. In the department of metaphysical and moral science, I would deprecate for our students a too early full view of the leading questions in morals, and the various theories of ethics which have been put forth with such philosophical parade, by ingenious men. An acquaintance with these is necessary, together with a knowledge of their comparative merits, and above all, an exposure of their errors, when tried by the test of revelation. Along with this, I would recommend a concise system of Christian ethics.

When in October, 1844, I received the appointment from the Synod, "to be the Professor of Theology, and to have the charge of training the young men for the holy ministry," I undertook the office under an impression that it comprehended the right and the obligation to see that the preliminary training, as distinct from what is properly theological, was adapted to the end in view. The young men I was led to consider as *all students in theology*, that is, "under training for the holy ministry," and this is the plain explanation of the fact, that so soon as I saw, or thought I saw, a deficiency in the "training" department—a deficiency which neither the learning nor the assiduity of the professor of "science and literature" appeared to me likely to supply—I set myself in some temporary way, to make up the deficiency. With this view, besides personal examinations, I prepared and delivered to the students, in November and December 1845, about twenty lectures on the philosophy of mind, and the nature of mental discipline; the Baconian method of induction, with its relations to theological study; the theories of morals; and the errors of Brown's moral system. In reference to the scripture doctrine of rewards. I also sought to obtain the assistance of several intelligent ministers of our own body, who might devote a month or two to such studies for the benefit of the young men, the church supplying their pulpits in the mean time. Although disappointed in this expectation, I still resolved to make another attempt, and in September, 1846, I applied for the second time, personally to Mr. Bayne of Galt, to undertake the department of Logic, with a special reference to the *philosophy of evidence*. He entertained the proposal favourably, and took with him a copy of "Hedge's Elements of Logic," for examination as to its fitness to be used as a text book. Circumstances prevented this plan from being realized; and at the commencement of the Session of 1847, I found for the first time that I had been labouring under a misapprehension to the extent of the powers entrusted to me, and that in reality, the preliminary department of study, was wholly independent of that allotted to theology. *With this last only* had I to do.

On the arrival of Mr. McCorkle, however, in November 1846, I made known to him my qualms in regard to the preparatory studies; and on finding that he had been engaged for several years in giving lectures to young men at Glasgow College, in Logic and Rhetoric, (prior to their admission on the more direct departments of philosophy), I drew up and read to the College Committee, a scheme for the winter studies, which would have put under the same man all the students who had not been instructed in these branches. I asked so far as to obtain the consent of the College Committee to his undertaking a class for *Rhetoric*; but

Logic was not included, and even the time allotted for the other, only *two hours in the week*, was far too short. Still, good was done by this arrangement; and looking back upon it as an experiment on a small scale, it seems to me to have been a successful one, and amply to bear out my suggestions and views in the matter.

From all that I can hear, it does not seem to me that the deficiency has been at all supplied during the winter session now drawing to its close. Of course, the proceedings of the Synod at Kingstoft in June last, precluded me from taking any part in College arrangements; but I still entertained the hope, that some proposal would have been made to me, to supplement a defect whose existence had not been questioned. When this was not done, I made offer privately to the students, that if any number, not fewer than six, wished an hour a day for logic and practical dialectics, my time and my labour were at their command. The time of the young men, however, was so fully taken up by other pursuits, that this number could not be obtained, and nothing was done till about a month ago, when my much esteemed friend, Dr. Willis, resolved to devote two hours weekly to the work. His class for Logic, however, embraced *none of the junior students*; and its application to the *senior* classes rather confirmed than disproved the soundness of my impressions.

It is needless to conceal the fact, that the real difficulty in occupying the long neglected field, has arisen from a feeling of delicacy towards the learned and accomplished gentleman who holds the chair of "science and literature" or "mental and moral philosophy," and on whose domain it is supposed that the Professorship of Logic would seriously trench. My reply to this has always been, that the field is already too large for any one man—that the number of students is yearly increasing—and that in point of fact, the field remains virtually not taken up at all. Am I asking too much for our rising institution, when I plead for a second Professor in the preparatory department? Or am I in error when I say, that beyond all question, the mental discipline with which I think the students ought to be privileged, so far from proving injurious, would rather pave the way for a more just appreciation of the prelections both of Professor Erson and of Dr. Willis?

In point of fact the Synod did, in June last, express an approval of the suggestion in the College Report, as to the necessity of an "additional Professor," (Record, p. 293), while they left it to the College Committee to fix "the precise place" which he should occupy." Mr. Bayne was, moreover, empowered to obtain if possible, such a professor from Scotland, but it appears that his instructions were not sufficiently specific to guide the Colonial Committee in the selection of such a person as might be qualified to fill the situation in view. One object of my statement will be gained if it succeeds in impressing on the College Committee, the sense of a glaring existing defect, and the necessity of obtaining the services of a *second* Professor in the preparatory department, under the designation perhaps, of the "Professor of Logic, Rhetoric, and Mental discipline."

I am aware of the objection on the ground of expense; but I am not inclined to infer from this that no effort should be made to supplement an existing defect by the means which are in our power. There are members of Synod, who, if asked, would cheerfully give their services gratuitously, for periods more or less extensive. Dr. Willis also, might with ease, appropriate one hour daily to this department; taking in connection with it, perhaps, the evidences of Christianity, so affording the very best specimens of the application of that part of Logic which has to do with the rules of evidence. With regard to myself, it would give me great pleasure to assist the young men in any way that may be thought best, to the extent of an hour a day. During the absence of Dr. Willis this summer, nothing would be more pleasant than to make myself in any measure useful in the department of mental training to the students who may remain in the city or near it.

I need scarcely say, that from what I have learned of the feelings of the Free Church of Scotland towards us, in the very department to which this letter refers, I am very sure that they will most readily assist us, by the mission of a Deputy,

In the end of autumn, who might be qualified and inclined to give help in the preparatory studies of the young men, during part, at least, of the winter season; or until a permanent arrangement can be made.

Although the present communication has respect mainly to the preparatory department of the College, I may be permitted to notice, in regard to all the students of the seminary, that one lecture a week, on pastoral duty, with devotional and casuistical exercises in addition, and visits to the sick, the afflicted, and the dying, would form a valuable addition to the existing arrangements, under the distinct title of pastoral theology. That this office might be enjoined with the office of the ministry in the city, without the charge of a plurality of offices, appeared to me very clear; and had the Synod seen meet to confide to me the charge of this delightful complaint on account of my acceptance of it.

If I find that even one member of committee shall coincide with me, in my views as thus developed, I shall not fail to bring the matter before the Committee and the Synod.

May the Great Head of the Church direct all your proceedings in wisdom, and overrule them all to his glory.

Dear Brethren, I am, very respectfully, Yours,

ROBERT BURNS.

"Ridentem dicere verum quid vetat?"

Dr. Burns will give me leave, I hope, without offence, to suggest my suspicion that his strictures on the subject of practical education, though advanced all along, with seeming confidence in their soundness, are not the result of any actual practical experience in the art itself. The sanguine hopes and projects of a warm imagination dealing with untried theories, are as remote from the conclusions of a judgment subdued and chastened by familiar acquaintance with the real difficulties and impediments, which distinguish practice from speculation, as the theory of motion—when not corrected by the application of an experimental knowledge of the laws of friction, resistance of the atmosphere, untoward nature of the materials, &c. &c.—from practical mechanics.

I. In the very first section the Doctor brings forward a modest suggestion to the College Committee. How far it may be fitted to commend to the confidence of the Church or of the College, the practical judgment and wisdom of the author of a theme of practical Logic, and a plain common sense view of practical philosophy, I presume not to anticipate. To guard against the too great facility, with which, in his judgment, students have been, and are now being admitted into the College, Dr. Burns proposes that the simple negative of any one member of the Committee shall arrest all further action. It certainly implies no very flattering compliment to the judgment of the Committee, still less to its spirit, if he believes in good earnest that it will become *felo de se*, and imitate the silly simplicity of the same in the fable. If the good Doctor despairs of keeping the Committee right, he has at least hit upon a most politic expedient, effectually to preclude the possibility of its doing wrong, and to make it an organ, like the old French parliament, to register the king's ordinances.

II. 1. The practical branches which Dr. B. proposes in this letter to graft upon the very slender stock of a system of psychology, condensed into half a dozen lectures, are neither few nor small, just as if one should attempt to graft a whole forest upon a single tree. And were his suggestions adopted and carried into effect to

the extent which he desires, the revolution achieved would be not so much a change of the system of our College, as a new system of education, in which science and theory are discarded, and the practical is made all in all. What is empiricism if this be not? The scheme seems to contemplate nothing less than three several Colleges:—One in the department of English Literature, *Composition, Elocution, Rhetoric, no School-boy Exercises but greatly mental, a Philosophical training.*—What can this be to begin with but a College of Rhetoric and Belles Lettres, with nothing less profound as a Class Book, than Campbell's Philosophy of Rhetoric—a splendid vision truly! And all this, be it noted, the first seasoning of our new College for youths from the Backwoods, whose literary disadvantages as settlers in the Province, and general status as to mental development, place them beyond the ordinary range of scholastic forms, and render a training specially for themselves absolutely essential. Is there not a little more of Rhetoric than of Practical Logic, and of a plain common sense view of things in this paragraph of the letter? *Backwood status as to mental development, graceful reading and Elocution, Philosophical training, Exercises greatly mental!* Are not these what logicians call incompatible terms?

The Doctor begins with the graceful and the ornamental—the *dulce*—and then takes up the *utile*. This is, I fear, what all practical educationalists who accept to think beginning at the wrong end. It is only hard bodies which will take a polish. Correct and graceful reading and elocution are the fruits of a *mind polished and refined by letters, and quickened and sharpened by science*, and this again the fruit of a long and very laborious and unromantic school-boy training and preparatory drilling. "*Pater ipse colendi haud facilem esse viam voluit.*"

There is no royal road to Rhetoric or Belles Lettres any more than to Geometry, and the powers of taste and judgment are the last and slowest in coming to maturity.

2. The next paragraph suggests the organization or creation of a College of practical Philosophy, and most chiefly of practical Logic, like the practical Rhetoric one which precedes it. This plain practical philosophy, has got more than six or seven, and perhaps if observed attentively, will be found to shew up—*Hydra-wise*—some ten or even a dozen heads, summa capita, every one of them of such a form, magnitude, capacity, that when the totum corpus shall have been completed, in the same style and in due proportion, it will altogether exhibit a most formidable and somewhat preternatural organization—an eighth wonder of the world, to which I can conceive nothing—in rerum natura—analogue or fit to be a parallel,—nothing—out of "the worlds imagined new" of wild Shakspeare's brain—"His men," like, "whose heads do grow beneath their shoulders."

III. College third is in the clouds—soaring far above the opaque terrens of this visible diurnal sphere. The higher walks of metaphysical and moral science, the cloud cap summits of this star-ypointing pyramid, if it were not more properly to be ycleped—this second Tower of Babel. We end just where we began, with the *practical—Christian Ethics*. The base of this edifice is light, airy and graceful, like a Grecian temple. The body is a solid, somewhat heavy, irregular Gothic structure, like a Medieval castle of motely architecture, with a few narrow loop-holes for windows, which scarce admit the light of Heaven to struggle

through; while the great summits, like the peaks of the great Alps or Andes, "look from their throne of clouds o'er half the world." Such is the lofty and impregnable fortress, in which an artillery of logic and learning, and physical and metaphysical enginery and ammunition are prepared against the day of battle and of war—mighty,—when launched by such an arm, (*hac dextra*) to confound and overwhelm the modern giants of impious world-builders, who conjure up their pandemoniums of moral or material worlds, with a diabolical sleight-of-hand, a moral or metaphysical legerdemain, as the giant Titans of old were buried beneath the mountains which they had piled up to scale the heavens, or the angels apostate in Milton's immortal Epic; and here the genius of philosophy is found to rival, if not to outdo the sublimity of poetry, even the great sublime of Poets himself—Milton!

The Doctor's heroic boast, to make the theory of world-building, as well as the theory of ideas, soon to fall, by a *coup de main*, I suppose, or the wag of his little finger, before the lessons and the inductive processes of an exact Logic, is certainly a feat above all Greek, above all Roman fame—*tu magnus eris Apollo*. I shrewdly suspect that the power of mere Logic, if it be not sustained and supplemented by a world power of knowledge, of more than facts and practicks—of principles and theoretic science,—descending to the profoundest depths, and reaching into the *intima penetralia* of the mysteries of Physics—Metaphysics and Morals, would be about as impotent—as a very fine razor to cut whin-stone, or to quarry granite rocks.

To be a believer in the Doctor's scheme of teaching all the practicks of Physics, Morals, and Metaphysics, to raw youths, from the back-woods, without any tincture of science, unless the Doctor intends, perhaps, that elocution and graceful reading are to serve as a suitable and sufficient succedaneum for banished science—exiled from our empirical school of philosophy—as poetry was from the Republic of Plato, or as women from some public hospitals, founded by Monks or Almsgynists—would require, not merely the old implicit faith, but a faith nothing short of that steady, sturdy, staunch believing Sor of Rome, who exclaimed,—*"Credo quia impossibile!"* For what less is really implied in the magnificent project of explaining, and that too to subjects whose mental status is evidently not lost sight of by the writer of the letter, all the false Theories—of Ideas—of Causation—of Geologists—Physiologists—of our speculative Astronomers with their Nebular Hypothesis, add to these our Mesmerists, Phrenologists, Cranioscopists, "like the author of the *Creation of Man*,"—all the vain Hypotheses of Descartes, Malebranche, and Locke—of Brown, Berkeley, Hume, Hobbes, Manley, Bentham, Hirtley, &c. &c. &c. But time would fail me to speak of them all; to teach all this, would surely demand "a genius universal as his theme—astonishing as chaos—as Hades deep—as Heaven sublime."

I certainly do no wrong,—I am only true to the very letter and spirit of the plan and method of teaching set forth in the printed letter,—when, in order to make its character and merit intelligible to plain unsophisticated understandings,—indicating it, so to speak, at the bar of common sense,—I liken it to the procedure of one, who, in teaching you to climb a long ladder, should greatly direct you, at one spring or bound, to clear the whole of the intermediate series of the

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steps from the ground ; and having thus gained, by a *coup de pied*, the summit, should, with a most absurd consistency, bid you leap down again, and then proceed to expound to you the method, the process of climbing a ladder, and should labour to convince you, that the most natural, easy, and common sense way of facilitating and accelerating motion, was to work against the force of gravity, not with it. This I believe to be a very faithful and undistorted representation of the Doctor's rationale of practical training—called rationale, a ratio, on the same principle as *lucius a non lucendo*. The Doctor may, indeed, like the Welch conjuror, call spirits from the vasty deep, but will they come at his call? He may undertake to teach a universe of knowledge—to condense into the compass of a few lectures the whole ocean of Science—as if he were to put all the waters of the sea into a pint bottle—but he ought to remember, that the poor students are not whales, though his lecture be a flood, and himself the very leviathan of lecturers,—he should remember, that what Shenstone has predicated of his map-devouring mice, cannot be predicated of them,—“a river or a sea is to them a dish of tea, and a kingdom, bread and butter,”—there is not the throat or gorge, so vastly expansive in its swallow, of such a prodigious yawning capability like Horace's—“*tanto promissor hiatu*”—that they can swallow, how much less less digest, whole provinces of science, kingdoms, aye, and worlds, or world systems, at one gulp.

I must now, however, advert to some graver offendings of the author of the letter, worse than ridiculous and absurd, as mischievous in their effects as they are criminal in their nature. The Doctor seems to be altogether without any touch of that temper, not more amiable for its humility than venerable for its wisdom, which forbids us to be rash in judging and condemning either the characters or the opinions, or the productions of other men. He manifests, on all occasions, a rash and reckless spirit of accusation, of crimination—weaving a web of the most formidable charges, out of a thread too fine for ordinary optics to discern. He seems to be void of all perception, of the need we have to arm ourselves, if I may so speak, in a complete panoply of candour—caution—and the most extreme circumspection, especially whenever we enter upon the ground of *morals, metaphysics, or theology*. Here our oracles should be given forth with fear and trembling, remembering how inadequate and imperfect an instrument language is, in its present state, to express with precision, and without ambiguity, ideas and doctrines which lie very far out of the ordinary range of speculation, and seem to desiderate a new language, appropriate to themselves, like that which has been invented by the celebrated German Philosopher—Kant. The questions which are presented to us in these highest walks of speculation, are like objects of sense, looked at through a mist or in the twilight ; or like the dissimilar aspects of the same objects, regarded by different spectators, from different points of view.

That arch-deceiver, imagination, plays many fantastic tricks, especially upon the rash, inexperienced, unskilful eye, and often betrays into the most ridiculous, and even monstrous blunders, so that without a world of candour, it is scarce possible to guard ourselves against misapprehension, while some make Gorgons, Hydras, and Chimeras dire, out of the most familiar, innocent creatures in *rerum natura*—something like the famous visionary illusion of the traveller, in the desert

of Asia and Africa, called the Mirage, in which a waste of sand is mistaken for a *magnum mare*. Such a glamour, in Scottish phrase, seems to have been shed over the keen, scrutinising eyes of the writer of the printed letter. In reading the philosophical speculations of the subtlest of Scottish metaphysicians, Dr. Thomas Brown, he has made the wonderful discovery, that his opinions are not essentially different from those of Berkeley and the Ideal School. Now, let any one read with attention, Dr. Brown's 25th Lecture, and he will see at one glance, that whatever difference some writers may fancy that they can trace between his views and those of Reid, both agree in resting our belief in the independent existence of an external world, on the adamant basis of intuitive truth and evidence; and, as it seems to me, the statement and estimate of that evidence, are much stronger and more impressive in the writings of the former, than even of the latter philosopher. Brown contends "that our notions of extension, and of the other primary qualities of matter, are just as much *relative*, as those of the secondary qualities, that is,—we know the external object or cause, only relatively to the sensations or affections, of which it is the antecedent. What it is as it exists in absolute independence of our perceptions, we who become acquainted with it only by those very perceptions, know not in either case,—but we know it, at least, (which is the only knowledge important to us,) as it exists relatively to us,—that is to say, it is *impossible for us*, from the very constitution of our nature, not to regard the variety of our perceptions, as occasioned by a corresponding variety of causes external to our minds," &c.

"That the connection of the feeling of extension with a corporeal substance, really existing without, depends on the arbitrary arrangements made by the Deity, and that all of which we are conscious, therefore, might have existed as at present, though no internal cause had been, Dr. Reid—who ascribes to an intuitive principle, our belief of an external universe—virtually allows." A belief—which it is impossible not to hold—which is universal, irresistible invariable,—is identical in its nature, with first truths or principles, of which Brown in another place has thus spoken, "These principles of intuitive belief so necessary for our very existence; and too important, therefore, to be left to the casual discovery of reason, are, as it were, an internal never-ceasing voice from the Creator and Preserver of our being. The reasonings of men, admitted by some and denied by others, have over us but a feeble power, which resembles the general frailty of man himself. These internal revelations from on high, however, are omnipotent like their author. It is *impossible* for us to doubt them, because to *disbelieve* them would be to deny what our very constitution was framed to admit. Even the Atheist himself, therefore, if, indeed, there be one who truly rejects a Creator and Ruler of the universe, is, thus, every moment, in which he adapts his conduct implicitly, and without reasoning, to these directions of the wisdom that formed him, obeying with most exact subserviency, that very voice which he is professing to question or to deride."

This may suffice to set at rest for ever the charge of idealism launched so recklessly against Dr. Brown. In vindicating him against the slap-dash condemnation, the Zoilus like criticism of the writer of the letter, I am moved by a fellow feeling—for I also am a stricken deer—I have also been hit by the darts of this archer Apollo of criticism.

In Session 1846-7 a terrible panic was excited in my Junior Philosophy Class by the unqualified charge of my having taught the Heresy of Idealism. This charge, without being first of all communicated to myself, was, with characteristic indiscretion and indecency, endeavoured to be impressed upon the minds of my students, some of whom came to me privately and confidentially, to impart the scruples with which Dr. Burns had been labouring, in his chivalrous spirit of courtesy and honour, to imbue their minds. As a specimen of the Doctor's credulity and extreme facility to take up a false suspicion or an ill report, I shall here subjoin a short but decisive extract from one of my lectures, containing my view of the doctrine, and which, I am sure, was iterated and reiterated, in the whole course of my teaching and lecturing, so that it was impossible for the student, if he were capable of learning any thing at all of the science; to go away ignorant of this great fundamental principle.—“If you ask me, why I believe in the real independent existence of the world without, which my senses reveal to me in a way so mysterious, I reply, that my faith or belief rests on the very same grounds, or grounds at least as valid and strong, as the demonstrations of the geometrician, which lead the student back to the first truths or axioms, on which the whole superstructure of the science ultimately rests. These great truths are, so to speak, taught of God,—they are,—like his law,—written in the heart—they are constituent essential elements of our rational nature; they form, as it were, the very substratum of that understanding, which the inspiration of the Almighty hath given to man. In regard then to his natural, as well as his moral and religious economy, man lives, yes, and must live by faith! This faith may be contradistinguished from religious faith, by calling it *natural*. It is an essential element of our rational nature. All true science and philosophy build upon this natural faith as their foundation; and the philosophy of Bacon assumes this as its first canon or principle, that we are to proceed, in the interpretation of the volume of nature just as that of Divine Revelation. In the former, the question is, what hath the Lord spoken or commanded? in the latter, what hath the Lord made, done, legislated? We believe in the existence of the material world on the very same kind and degree of evidence as we believe in our own existence, or even in our own consciousness,—a belief of which, the veriest sceptics have not ventured to question the validity. It is the language of our nature,—therefore, it is the language of our Maker,—whose testimony may be said with literal strictness of truth and propriety, to seal its certainty. Indeed, what is it, but the still small yet omnipotent voice of God, saying unto us, “*believe and live*,” and if we are so constituted in our natural being, that if we refuse our faith to the testimony of God within us, we must inevitably perish, why should it be thought incredible that a religious faith—analagous to this natural,—should be the indispensable condition of our moral, spiritual and eternal life?” *So much for my idealism*. I have no consciousness of having the least shadow of a title to sit by the side of Bishop Berkeley, though I am almost tempted to say to my censor in the somewhat over-enthusiastic strain of an ancient Platonist,—“*Mehercle cum Platone mallem errare quam tecum recte sentire*,”—but perhaps it has fared with me, as with another person, of whom I have read, that he had been speaking poetry all his life, without knowing it.

There are letters printed, published, and widely circulated, on both sides of the

Atlantic, in which this besetting sin of the letter writer—this infirmity, not of noble minds,—not leaning to the side of virtue, still less of charity, has been exhibited, in all its dark deformity, to the eye of all the world—I am sorely tempted to take up the rod—to apply the lash—as I cannot but think, that matters are now come to such a pass, that forbearance is almost a vice,—but I shall for the present, just content myself with warning the offender, that if no other one will undertake the ungrateful office of castigator, I shall feel constrained to try my hand. If the Doctor is determined to go on to insult his Brethren in the Ministry, and the whole Church, in this land, by gratuitous, and—I cannot use a gentler term—slandorous charges, of ignorance of Free Church principles, or even something like antipathy to them, I shall feel it a moral duty to investigate the historical right to the honorable title of Free Churchman, on the part of this accuser of his Brethren; and to draw the public eye to some striking points of contrast between his own character and history as a son of Free Church, and that of all his brethren in this land.

If I should be arraigned, on any hand, for employing, on this occasion, the weapons of ridicule and satire, my answer to them that accuse me is, I know no other kind of logic, so proper to be employed when absurdity and nonsense are likely to prove practically mischievous, and come recommended by any weight of authority. If I am accused of being too severe, let my own wrongs plead my apology, and let the number and magnitude of the offences wantonly reiterated and persisted in—which demand castigation—be duly weighed, and I feel assured that there is no sensible and honest jury that will not unanimously acquit me.

"Ridiculum acri
Fortius ac melius magnas plerumque secat res."

Toronto, June 28th, 1848.

H. ESSON.

NOTE D.

Extracts from Beattie, Hallam, Douglas, and Stewart, illustrating the great principles of the art of Education.

Deeming that it might be useful for the purpose of diffusing clear, accurate, and sound views of the art of Education, in relation both to the teacher and the learner, I have endeavoured to embody in this note a few extracts from Beattie, Hallam, Douglas of Cavers, and Stewart, which appear to myself to possess a very high value; and the last one especially, from Stewart's Elements of the Philosophy of the mind, I would recommend to the most earnest attention of every lover of truth and wisdom—to every student, in every stage of his intellectual progress, as containing the only true method and rationale, of carrying forward the noblest and most glorious of all works—the improvement of the human mind, and the enlargement of human knowledge. This may be called the golden rule, the grand fundamental law or canon of intellectual excellence, as its counterpart in the gospel is of moral perfection.

The first which I shall give, has a very intimate bearing upon the general views of the value of classical training, in its subserviency to the same end of general mental culture and discipline, which forms the basis in a very inferior degree,

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the best recommendation of the studies of mathematics, when viewed not as necessary parts of a professional, but as constituent elements of a liberal education, and a complete discipline or accomplishment of the human mind:—

"The study of a system of grammar, so complex and so perfect as the Greek or Latin, may, with peculiar propriety, be recommended to children; being suited to their understanding, and having a tendency to promote the improvement of all their mental faculties. In this science, abstruse as it is commonly imagined to be, there are few or no difficulties which a master may not render intelligible to any boy of good parts, before he is twelve years old. Words, the matter of this science, are within the reach of every child; and of these the human mind, in the beginning of life, is known to be susceptible to an astonishing degree: and yet in this science there is subtlety, and a variety, sufficient to call forth all the intellectual powers of the young student. When one hears a boy analyse a few sentences of a Latin author; and show that he not only knows the general meaning, and the import of the particular words, but also can instantly refer each word to its class; enumerate all its terminations, specifying every change of sense, however minute, that may be produced by a change of inflexion or arrangement; explain its several dependencies; distinguish the literal meaning from the figurative, one species of figures from another, and even the philosophical use of words from the idiomatical, and the vulgar from the elegant: recollecting occasionally other words and phrases that are synonymous, or contrary, or of different though similar signification; and accounting for what he says, either from the reason of the thing, or by quoting a rule of art, or a classical authority:—one must be sensible, that by such an exercise, the memory is likely to be more improved in strength and readiness, the attention better fixed, the judgment and taste more successfully exerted, and a habit of reflection and subtle discrimination more easily acquired, than it could be by any other employment suited to the capacity of childhood. A year passed in this salutary exercise will be found to cultivate the human faculties more than seven spent in prattling that French which is learned by rote: nor would a complete course of Voltaire yield half so much improvement to a young mind, as a few books of a good Classic author, of Livy, Cicero, or Virgil, studied in this accurate manner."

"I maintain," says Dr. Beattie, "that every language, and indeed every thing that is taught children, should be accurately taught: being of opinion, that the mind is more improved by a little accurate knowledge, than by an extensive smattering; and that it would be better for a young man to be master of Euclid or Demosthenes, than to have a whole dictionary of arts and sciences by heart. When he has once got a taste of accuracy, he will know the value and the method of it; and with a view to the same gratification, will habitually pursue the same method, both in science, and in the general conduct of his affairs: whereas a habit of superficial thinking perverts and enervates the powers of the soul, leaves many of them to languish in total inactivity; and is too apt to make a man fickle and thoughtless, unprincipled and dissipated for life. I agree with Rousseau, that the aim of education should be, to teach us rather *how* to think, than *what* to think: rather to improve our minds so as to enable us to think for ourselves, than to load the memory with the thoughts of other men." But still it is true, that a mind prepared by proper discipline for making discoveries of its own, is in a much higher state of cultivation, than that of a mere scholar who knows nothing but what he has been taught. The latter resembles a granary, which may indeed be filled with corn, but can yield no more than it has received; the former may be likened to a fruitful field, which is ever in a condition to bring riches and plenty, and multiplies an hundred fold every grain that has been committed to it."—*Dr. Beattie on Classical Learning.*

Stewart quotes the following sentence from a French work, entitled *Art de penser*, by an author whom he characterises as very judicious, less on account of the sanction which it gives to his own phraseology, than of the importance of

the truth which it conveys: "Reason is commonly employed as an instrument to acquire the sciences; whereas, on the contrary, the sciences ought to be made use of as an instrument to give reason its perfection."

In order to elucidate and confirm the truth and importance of this maxim, let us just reflect that truth is the basis on which all principles, natural, moral, and religious rest, and can have no other proper or sufficient foundation. The conviction of the reason or understanding, in the free and legitimate exercise of its powers of investigation and reasoning, is the only way in which we can be put in actual possession of the truth. Conviction, or full assurance of the truth, is the ultimate basis, therefore, of moral and religious principle. If we would "hold fast that which is good," we must prove, first of all, its truth and excellence. If we would be fully persuaded in our own minds, as every man, according to the doctrine of the apostle, ought to be, then all ought to have full freedom and scope to think and judge and determine each for himself. How intimately related, then, is our intellectual to our moral and religious culture! How vastly important is sound and clear thinking, not only to the great end of convincing, converting, enlightening, and reforming others, but even directly and immediately to the production and confirmation of our own principles of faith and action.—It is important for both the Professors and the students to keep constantly in view this intimate and essential unity of intellectual and moral education. To teach youth to think without passion, prejudice, or undue bias of any sort, in the best of all possible foundations and guarantees for the truth and soundness, as well as the solidity, stability, and purity of their moral principles; it is the only way to make a sure and trustworthy provision for the genuine orthodoxy of their religious faith, of which—the love of truth, early implanted in the mind—the guileless simplicity of those whom the scripture denominates babes in Christ, having a childlike simplicity and singleminded desire to know and to do the will of their Father in heaven, is at once the natural source and the only effectual security.

Let us never forget that the chief end of all sound and enlightened education is, to form honest, earnest, cautious, conscientious thinkers and searchers after truth, and that the first requisite for the attainment of this all-important end, is to inspire a pure and fervent love of truth, grounded upon the fear of the Lord, which is the beginning of wisdom, and guided in its action, in the second place, by a suitable direction of the student, in the conduct of his understanding, and in the method of searching after truth. These canons have an obvious and striking application to a Theological School. In it the great aim should be to qualify and to dispose the student, in the knowledge of the original languages, and of the soundest canons of general, and especially of biblical criticism,—to exercise his own judgment, with as little dependance on opinions and authorities merely human, as possible; yet far from leaving his reason and judgment to the imminent peril which an absolute, unlimited licence would imply, in the corrupt state of fallen man, and the inexperienced, naturally ardent spirit of the youthful mind, it should be our equally zealous and watchful care, to inculcate a modest and reasonable respect for authority, and above all, to impress with the most solemn emphasis, the infinite obligation, yea, necessity of an implicit, constant, entire dependance to the

spirit of faith, prayer, humility, and childlike simplicity, upon the promised aid and illumination of the Holy Ghost.

The same canons hold, with equal force, in the teaching of systematic Theology, in which, the less there is of the dogmatic spirit and method, and the more that the mind of the student is kept clear of all party prejudice and sectarian bias in reviewing, comparing, estimating the conflicting systems, doctrines, and opinions of Theological schools and their founders and leaders, the more likely he is to settle down into that genuine and blessed orthodoxy, which is the fruit of a soul taught of God, and, with the docility of a little child, receiving the kingdom of heaven, the truth of the gospel in faith and love, and resting on it with full assurance, as the testimony of God. I do not believe that the cause of orthodox or scriptural christianity was ever better served or promoted than by the candid strain and spirit of the published lectures of the late Dr. Hall, who seems to have furnished a most unexceptionable model of treating controverted doctrines, and guiding youthful enquirers in the spirit of a calm and candid impartiality, without indifference or latitudinarianism, into a sound and scriptural, and without moderate and unbigotted orthodoxy. That this is not a very common character among our Theological teachers, has been very generally remarked. "It is not uncommon," says Hallam, "to meet with persons, especially who are or have been engaged in teaching others dogmatically, what they have themselves received in like manner; to whom the inductive philosophy appears a mere school of scepticism, or, at best, wholly inapplicable to any subjects which require entire conviction. A certain deduction from certain premises is the only reason they acknowledge. This is peculiarly the case with Theologians; but it is also extended to every thing that is taught in a synthetic manner." Hallam quotes a passage from the 9th chapter of Bacon's *de Augmentis*, "which, well weighted," he observes, "may shew us where, why, and by whom the synthetic and syllogistic methods have been preferred to the deductive and analytical." [See Hallam's *Literature of Medieval Europe*, vol. 2, chap. 3, sect. 2, note to paragraph 60.]

"Though the spirit," observes Douglas of Cavers, in his errors regarding religion, part 8, sec. 12, "in the supreme agent, in all those changes which are coming over the world, still he will work as hitherto by the employment of a variety of means; and of these instruments, none will have a wider influence than inductive philosophy, not only in the truths which it discovers, but also by the temper of mind which it forms. The schools of ancient philosophy resounded with disputes, every position was questionable, and every question gave rise to a new opinion. Philosophy wore a new aspect in every new sect; nothing was stable or permanent; the veil remained as thickly spread over nature as before; the mind gained in strength, but not in discovery. Nothing was obtained but matter for fresh arguments and endless controversy. But since experience has been taken as the sure guide to truth, and inductive philosophy has succeeded to the scholastic sophistry of the darker ages, the voice of disparagement is hushed, and instead of noise and perpetual jangling, there is the quiet and ever progressive discovery of nature. Instead of the arrogant presumption of the old philosophers, confident in their ignorance, there is the childlike docility of men, who, though they have discovered much, far from being presumptuous from what they have already obtained, are proceeding with unabated caution step by step, slowly, but perseveringly, to the remoter results of science. The same spirit introduced into religion, will be equally favourable to peace and truth in studying the word of God. That narrow and contentious spirit which is barren of truth, but fruitful in controversy, will be every where discountenanced, and

it will be the aim of all to receive the doctrines of the Scriptures in their genuine import, pure and unsophisticated, without any mixture of the opinions of men."

[See also some very profound and original views on the tendency and habits of inductive and deductive reasoning, in Whewell's *Bridgewater Treatise on Astronomy and General Physics*. Book III.]

The order of study, now almost universally prevalent, is a manifest inversion of the natural and philosophical order. The latter would lead us to place reflection before reading and lecturing, and to make and keep all our reading and researches after truth, subordinate and subservient to the work of habitual and systematical thinking. This is the method of intellectual culture, of scientific and philosophical study, expounded and recommended by Stewart, in his *Elements*.

Reflection is the grand organ and medium of mental culture, and of scientific acquirement. When we read or enquire, with a view to remove doubts, or to dispel darkness from our own minds—when we are searching for new light and evidence in support of views in the direct, immediate and eager pursuit of which our minds are warmly and freshly engaged and exercised—we must read and enquire with a keen zeal, with a vivid interest and enjoyment, which will make our labour at once more pleasant, and more productive. It was this subordination of reading to reflection, which formed the great minds, which have shed a transcendent lustre on ancient Greece and Rome, and in modern times have rendered the scholars and philosophers of the 16th and 17th centuries, pre-eminently illustrious:—

"The Greeks and Romans," says Dr. Beattie, in his *Essay on Classical Learning*, "were more accurate students than the moderns are. They had few books, and those they had were not easily come at; what they read, therefore, they read thoroughly. I know not, whether their way of writing and making up their volumes, as it rendered the perusal more difficult, might not also occasion a more durable remembrance. From their conversation-pieces, and other writings, it appears, that they had a singular facility in quoting their favourite authors. Demosthenes is said to have transcribed Thucydides eight times, and to have got a great part of him by heart. This is a degree of accuracy, which the greater part of modern readers have no notion of. We seem to think it more creditable to read many books superficially, than to read a few good ones with care; and yet it is certain, that by the latter method we should cultivate our faculties, and increase our stock of real knowledge, more effectually, and perhaps more speedily, than we can do by the former, which indeed tends rather to bewilder the mind, than to improve it. Every man, who pretends to a literary character, must now read a number of books, whether well or ill written, whether in attractive or insignificant, merely that he may have it to say, that he has read them. And therefore I am apt to think, that, in general, the Greeks and Romans must have been more improved by their reading, than we are by ours. As books multiply, knowledge is more widely diffused; but if human wisdom were to increase in the same proportion, what children would the ancients be, in comparison of the moderns! of whom every subscriber to the circulating library would have it in his power to be wiser than Socrates, and more accomplished than Julius Cæsar!"

I am well persuaded, that the most effective culture of the human mind, and the most productive of all the methods of reading, would be found to be that, which, strictly conforming to the enlightened directions of Stewart, gives the precedence to reflection and meditation over reading, and all other modes of enquiry and research. The conclusion which this forces upon the mind, is, that the surest, and even shortest road to high intellectual culture, and to solid and extensive acquire-

wants in knowledge and science, is to record the daily progress of our minds, and thus to make writing and thinking the grand organs of our intellectual working. I have no doubt therefore, that were our students directed by us in the conduct of such a process of study, and of such a record of all its results, we should make the best provision for their ultimate accomplishment in all that constitutes the aim and end of an enlightened and liberal education.

I cannot better elucidate or confirm the principles on which I should desire to have our Educational system in Knox's College constituted and conducted, than by submitting the following extracts from the first volume of Siewart's *Elements of Philosophy of Mind*, chapter VII., On Memory, (see page 235, section V.,) in which he expounds the effects produced on the memory by committing to writing our acquired knowledge. This is that part to which I referred, (see page 16 of statement) in describing my method of combining the practical with the speculative in my psychological training, and I regard it as inestimably precious, especially to our students, who will here find the true and only canon that I know for the conduct of the great work of mental culture, and the systematic prosecution of their studies, and particularly of their reading. For this reason I give it at length:—

"Effects produced on the Memory by committing to Writing our acquired Knowledge.—Having treated at considerable length of the improvement of memory, it may not be improper, before leaving this part of the subject, to consider what effects are likely to be produced on the mind by the practice of committing to writing our acquired knowledge. That such a practice is unfavourable, in some respects, to the faculty of memory, by superseding, to a certain degree, the necessity of its exertions, has been often remarked, and I believe is true; but the advantages with which it is attended in other respects, are so important, as to overbalance greatly this inconvenience.

"It is not my intention at present to examine and compare together the different methods which have been proposed of keeping a common-place book. In this, as in other cases of a similar kind, it may be difficult, perhaps, or impossible, to establish any rules which will apply universally. Individuals must be left to judge for themselves, and to adapt their contrivances to the particular nature of their literary pursuits, and to their own peculiar habits of association and arrangement. The remarks which I am to offer are very general, and are intended merely to illustrate a few of the advantages which the art of writing affords to the philosopher, for recording, in the course of his progress through life, the results of his speculations, and the fruits of his experience.

"The utility of writing, in enabling one generation to transmit its discoveries to another and in thus giving rise to a gradual progress in the species, has been sufficiently illustrated by many authors. Little attention, however, has been paid to another of its effects, which is no less important; I mean to the foundation which it lays for a perpetual progress in the intellectual powers of the individual.

"It is to experience, and to our own reflections, that we are indebted for by far the most valuable part of our knowledge; and hence it is, that although in youth the imagination may be more vigorous, and the genius more original, than in advanced years; yet, in the case of a man of observation and inquiry, the judgment may be expected, at least as long as his faculties remain in perfection, to become every day sounder and more enlightened. It is, however, only by the constant practice of writing, that the results of our experience, and the progress of our ideas can be accurately recorded. If they are trusted merely to the memory, they will gradually vanish from it like a dream, or will come in time to be so blended with the suggestions of imagination, that we shall not be able to reason from them with any degree of confidence. What improvements in science might we not flatter ourselves with the hopes of accomplishing, had we only actively and

industry to treasure up every plausible hint that occurs to us! Hardly a day passes, when many such do not occur to ourselves, or are suggested by others; and detached and insulated as they may appear at present, some of them may perhaps afterwards, at the distance of years, furnish the key-stone of an important system.

"But it is not only in this point of view that the philosopher derives advantage from the practice of writing. Without its assistance he could seldom be able to advance beyond those simple elementary truths which are current in the world, and which form, in the various branches of science, the established creed of the age he lives in. How inconsiderable would have been the progress of mathematics, in their more abstruse speculations, without the aid of the algebraical notation; and to what sublime discoveries have they been led by this beautiful contrivance, which, by relieving the memory of the effort necessary for recollecting the steps of a long investigation, has enabled them to prosecute an infinite variety of inquiries, to which the unassisted powers of the human mind would have been altogether unequal! In the other sciences, it is true we have seldom or never occasion to follow out such long chains of consequences as in mathematics; but in these sciences, if the chain of investigation be shorter, it is far more difficult to make the transition from one link to another; and it is only by dwelling long on our ideas, and rendering them perfectly familiar to us, that such transitions can in most instances, be made with safety. In morals and politics, when we advance a step beyond those elementary truths which are daily presented to us in books or conversation, it must be by committing them to writing, and making them frequently the subjects of our meditation. When we have once done so, these conclusions become elementary truths with respect to us; and we may advance from them with confidence to others which are more remote, and which are far beyond the reach of vulgar discovery. By following such a plan, we can hardly fail to have our industry rewarded in due time by some important improvement; and it is only by such a plan that we can reasonably hope to extend considerably the boundaries of human knowledge. I do not say that these habits of study are equally favourable to brilliancy of conversation. On the contrary, I believe that those men who possess this accomplishment in the highest degree, are such as do not advance beyond elementary truths; or rather, perhaps, who advance only a single step beyond them; that is, who think a little more deeply than the vulgar, but whose conclusions are not so far removed from common opinions, as to render it necessary for them, when called upon to defend them, to exhaust the patience of their hearers, by stating a long train of intermediate ideas. They who have pushed their inquiries much farther than the common systems of their times, and have rendered familiar to their own minds the intermediate steps by which they have been led to their conclusions, are too apt to conceive other men to be in the same situation with themselves; and when they mean to instruct, are mortified to find that they are only regarded as paradoxical and visionary. It is but rarely we find a man of very splendid and various conversation to be possessed of a profound judgment, or of great originality of genius.

"Nor is it merely to the philosopher, who wishes to distinguish himself by his discoveries, that writing affords an useful instrument of study. Important assistance may be derived from it by all those who wish to impress on their minds the investigations which occur to them in the course of their reading; for, although writing may weaken, as I already acknowledged it does, a memory for detached observations, or for insulated facts, it will be found the only effectual method of fixing in it permanently, those acquisitions which involve long processes of reasoning.

"When we are employed in inquiries of our own, the conclusions which we form make a much deeper and more lasting impression on the memory, than any knowledge which we imbibe passively from another. This is undoubtedly owing, in part, to the effect which the ardour of discovery has, in rousing the activity of the mind, and in fixing its attention; but I apprehend it is chiefly to be ascribed to this, that when we follow out a train of thinking of our own, our ideas are ar-

fringed in that order which is most agreeable to our prevailing habits of association. The only method of putting our acquired knowledge on a level, in this respect, with our original speculations, is, after making ourselves acquainted with our author's ideas, to study the subject over again in our own way; to pause, from time to time, in the course of our reading, in order to consider what we have gained; to recollect what the propositions are, which the author wishes to establish, and to examine the different proofs which he employs to support them. In making such an experiment, we commonly find, that the different steps of the process arrange themselves in our minds, in a manner different from that in which the author has stated them; and that, while his argument seems, in some places, obscure, from its conciseness, it is tedious in others, from being unnecessarily expanded. When we have reduced the reasoning to that form which appears to ourselves to be the most satisfactory, we may conclude with certainty, not that this form is better in itself than another; but that it is the best adapted to our memory. Such reasonings, therefore, as we have occasion frequently to apply, either in the business of life, or in the course of our studies, it is of importance to us to commit to writing, in a language and in an order of our own; and if at any time, we find it necessary to refresh our recollection on the subject, to have recourse to our own composition, in preference to that of any other author.

"That the plan of reading which is commonly followed is very different from that which I have been recommending, will not be disputed. Most people read merely to pass an idle hour, or to please themselves with the idea of employment, while their indolence prevents them from any active exertion; and a considerable number with a view to the display which they are afterwards to make of their literary acquisitions. From whichever of these motives a person is led to the perusal of books, it is hardly possible that he can derive from them any material advantage. If he reads merely from indolence, the ideas which pass through his mind will probably leave little or no impression; and if he reads from vanity, he will be more anxious to select striking particulars in the matter or expression, than to seize the spirit and scope of the author's reasoning, or to examine how far he has made any additions to the stock of useful and solid knowledge. 'Though it is scarce possible,' says Dr. Butler, (see the preface to his Sermons,) 'to avoid judging in some way or other, of almost everything which offers itself to one's thoughts, yet it is certain that many persons, from different causes, never consult their judgment upon what comes before them, in such a manner as to be able to determine how far it is conclusive. They are perhaps entertained with some things, not so with others; they like, and they dislike; but whether that which is proposed to be made out, be really made out or not; whether a matter be stated according to the real truth of the case, seems, to the generality of people, a circumstance of little or no importance. Arguments are often wanted for some accidental purpose; but proof, as such, is what they never want, for their own satisfaction of mind, or conduct in life. Not to mention the multitude who read merely for the sake of talking, or to qualify themselves for the world, or some such kind of reasons, there are even of the few who read for their own entertainment, and have a real curiosity to see what is said, several, which is astonishing, who have no sort of curiosity to see what is true; I say curiosity, because it is too obvious to be mentioned how much that religious and sacred attention which is due to truth, and to the important question, what is the rule of life, is lost out of the world.

"For the sake of this whole class of readers, for they are of different capacities, different kinds, and get into this way from different occasions, I have often wished that it had been the custom to say before people nothing in matters of argument but premises, and leave them to draw conclusions themselves; which, although it could not be done in all cases, might in many.

"The great number of books and papers of amusement, which, of one kind or another, daily come in one's way, have in part occasioned, and most perfectly fall in with and humour, this idle way of reading and considering things. By this means, time, even in solitude, is happily got rid of without the pain of attention.

neither is any part of it more put to the account of idleness, (one can scarce forbear saying, is spent with less thought,) than great part of that which is spent in reading.

"If the plan of study which I formerly described, were adopted, it would undoubtedly diminish very much the number of books which it would be possible to turn over; but I am convinced that it would add greatly to the stock of useful and solid knowledge; and by rendering our acquired ideas in some measure our own, would give us a more ready and practical command of them: not to mention, that if we are possessed of any inventive powers, such exercises would continually furnish them with an opportunity of displaying themselves upon all the different subjects which may pass under our review.

"Nothing, in truth, has such a tendency to weaken, not only the powers of invention, but the intellectual powers in general, as a habit of extensive and various reading, without reflection. The activity and force of mind are gradually impaired, in consequence of disuse; and not unfrequently all our principles and opinions come to be lost, in the infinite multiplicity and discordancy of our acquired ideas."

I should be disposed to regard this passage of Stewart as furnishing what I might call the Student's golden rule! teaching him the best method of conducting all his work, whether it be in reading, writing, or thinking—the true art of doing the greatest amount of the best work, with the greatest economy of time and labour. Any youth who will have the vigour of resolution to adopt and faithfully carry out this rule in the conduct of his understanding and studies, could not fail, I am persuaded, to outstrip very far all who follow the beaten path, not indeed in the extent and variety of his reading, or of the branches of knowledge which too easily engage the attention of a superficial and desultory student, but certainly in the accuracy, solidity, and depth of his understanding and of his acquirements.

NOTE E.

Extracts from Russel, on Scottish Education.

I have happily found a further evidence and confirmation of the facts and arguments of my statement, and of my reasons of dissent, as given in Note A., in Russel's View of Education in Scotland, a very interesting and valuable performance. I have great pleasure in giving the following extracts, which shed a very important light on the whole question, and illustrate and enforce the importance of a sound and scientific method and distribution of the departments and branches of Education.

Dr. Russel gives, in the seventh Letter of his View of Scottish Education; the outline of the system of the Aberdeen Universities, extracted from the little work of Dr. Gerrard, above quoted:—

"I. The first year is spent in classical learning under the professor of Greek; whose business it is, not only to teach that elegant language in which the sciences were first delivered, and which, by retaining their original terms, and by being used by those great masters whose works are still acknowledged standards in them, must always be regarded as the foundation of knowledge, but to open the minds of youth, by explaining antiquity, by acquainting them with the lives and characters of the chief classic authors, and by pointing out the uses of literature, or the various purposes it serves in life.

"II. In the next year, as much of the student's time as the professor thinks proper, is spent in reading the Greek and Latin classics, both that they may still improve in these languages, the great conduits through which ancient

learning is, communicated to us, and that, by being conversant with the best authors, they may early acquire a taste for works of genius. 2. They are to be instructed in *history*, both *natural* and *civil*, along with the elements of *geography* and *chronology*, on which civil history depends. The study of these is judged to be a just intermediate step between the study of languages and general reasonings concerning things. History conveys to a young mind instructions adapted to its faculties which at the same time open and prepare it gradually for apprehending the conclusions of philosophy. Farther, on the facts that history, especially natural, relates, philosophy, which is but a picture of the real constitutions and laws of things, must be entirely founded. In the prosecution of it there must be a perpetual intercourse between the mind and nature. Philosophy can never be further improved than in proportion as history is perfected; our knowledge in the one and the other must keep pace, for history relates the phenomena, and philosophy explains and accounts for them. The study of history, particularly natural history, must therefore be proper to precede that of philosophy, not only as it opens the mind, but also as it furnishes it with the requisite materials. These are parts of knowledge entirely omitted in the former method of university education, though of the greatest utility and moment in life. And it is, they apprehend, a considerable advantage in their new plan of teaching, that by it these useful branches of study are introduced into the scheme of education. Natural history, besides its advantages already mentioned, is the immediate foundation of almost all the arts of life, agriculture, gardening, manufactures, medicine, &c. the professor to whose share it falls, does not confine it to mere descriptions of natural bodies, their various classes, characters, principles, and parts; but gives an account also of the various uses of these natural bodies, and of the principles of the several arts in life which depend upon, and are employed about them. Nor is civil history restricted to a narration of epochs and facts, though in that the foundation is laid, but it extends to an explication of the causes of the rise and fall of states, and of the great revolutions that have happened in the world, and to reflections on characters, manners, customs, &c., which constitute its usefulness in general, and must render it peculiarly advantageous to young persons, by conveying moral instruction by example; by forming a habit of attention to the great transactions of men; by supplying their want of experience by that of others, and by making them in a great measure acquainted with the world before they come to act a part in it. 3. At the same time the students in this class attend the professor of mathematics for the elementary parts, as the knowledge of the mathematical sciences is an absolutely necessary key to the philosophy of bodies.

"III. As material objects are the most familiar to young minds, and experiments and reasonings concerning them are most level to their capacities, the students in the third year of their course, enter on the study of natural experimental philosophy, and are instructed in its several branches, mechanics, hydrostatics, pneumatics, optics, astronomy, magnetism, electricity, and any others which farther discoveries may add to the parts already cultivated. 2. They are, as far as time will allow, instructed in the principles of criticism and the belles lettres. 3. They at the same time continue their mathematical studies, so as they may go hand in hand with their studies in the different parts of natural philosophy. The professor of mathematics, the first year the students are under his care, explains to them the true principles of arithmetic, teaches Euclid's Elements of Geometry, plane trigonometry, practical geometry, geography, and the first principles of algebra. The second year of their course with him, he teaches spherical trigonometry, spherical geometry, conic sections, and astronomy; and carries his pupils forward to the highest parts of algebra. The third year he teaches the highest parts of algebra, the doctrine of the quadrature of curves, and fluxions, and some parts of Sir Isaac Newton's Principles of Philosophy.

"In the last year of the philosophical course are taught, 1. Pneumatology, or the natural philosophy of spirits, the doctrine of the nature, faculties, and states

of the human mind,—and natural theology. 2. Moral philosophy, containing ethics, jurisprudence and politics, the study of these being accompanied with the perusal of some of the best ancient moralists. 3. Logic, or the laws and rules of inventing, proving, retaining, and communicating knowledge; along with, 4. Metaphysics.

“The three professors of philosophy and the professor of Greek attend their students three hours a-day as formerly, during the whole of the session of college, which commences on the first day of November, and ends in April.”

“Logic, as was stated, is not introduced here immediately after the languages, as at the other Scottish colleges; but gives place to history, mathematics, and natural philosophy, during the second and third session, and is afterward taught along with ethical science during the fourth. Now, it strikes me, that much might be said in support of this arrangement; and, indeed, a great deal was said to excellent purpose by the people who formed and introduced it. It would employ too much time to go over their arguments at length; and they seem to rest upon this fundamental position, that the philosophy of body is more suitable than the philosophy of mind to engage the attention and cultivate the faculties of youthful students; and that it is necessary to lay up a stock of knowledge, before entering upon the study of the various kinds of evidence which induce belief, or the rules of reasoning considered as an art. In other words, it is requisite before you begin to reason, to have something to reason about; and before you set yourself to review and estimate the different species of evidence, and the various kinds of testimony, to have it in your power to recollect instances in which you formed your judgment upon actual examination of proof, and to compare examples of conclusions founded upon different principles of probation: ‘Logic,’ it is justly remarked, ‘is precisely the same to philosophy that works on criticism are to poetry.’ The rules of criticism are formed by an accurate scrutiny and examination of the best works of poetry. To one who had never read a poem, these rules would be obscure and useless; he could not comprehend them, far less would he be able to form a judgment of their justness, and of the reasons on which they are founded. If one peruses the best poetical performances, he will acquire some degree of taste, though he has never professedly studied the rules of criticism; and he will, at the same time, lay in materials and obtain a stock of examples which may render these rules intelligible to him, and enable him to judge whether they are just or not. These observations illustrate very clearly the relation that subsists between logic and the knowledge of things in general; we must have made the acquisition of a certain portion of science, before we can be prepared to understand the method or laws according to which the mind operated in the process of inference or deduction. To make the study of logic introductory to philosophy, is therefore to give it an improper place; and is in fact, to retain the order and principles of scholastic education, when that education itself has been exploded. No man in modern times regards dialectics as the *organon* or instrument by which knowledge is acquired, or insists that rules of reasoning must be first studied and committed to memory, and afterwards applied to the sciences, moral and physical. Logic, properly so called, is, in reality, very little attended to in any Scottish college; and the classes which take their designation from that term, embrace a species of study partly literary and partly pneumatological, which is denominated a course of logic, rather because it occupies the place of the ancient dialectics, than because it has much in common with that celebrated invention.

“Now, it must undoubtedly strike you that the professors at Aberdeen entertained very just views of education, when they substituted mathematics in place of logic, and thus secured the best foundation in the minds of their pupils, for scientific attainments, and the general improvement of their understandings. Mathematics have been almost universally regarded as the most suitable logic with which to commence a course of academical study, both on account of the vigour and firmness which they impart to the intellect, and also for the quick discernment of sophistry and the love of sound reasoning which they naturally inspire. They

afford indeed a species of discipline to the mind, which is to be derived from no other exercise; insure it to strict argument, and a rigid examination of particulars; and are calculated, above all, to form that habit of close and undivided attention, without which there can be no eminence in science. The subjects which constitute the preliminary education of young men at three other universities of Scotland, partake too much of speculation and hypothesis; and tend rather to inflate the mind, than to store it with knowledge. They get too soon immersed in discussions which puzzled Berkeley and Locke, Reid and Hume; and skimming over the various opinions and doctrines which have been successively maintained and exploded by the most ingenious philosophers, they generally carry away nothing from the classes of the second and third years, but a mass of confused notions and indistinct recollections;—of which the ordinary result is a certain shallow and talkative pedantry, and a premature and pertinacious dogmatism on theories of taste and ethical systems. This, in itself, is the knowledge which puffeth up, and the more useless and paradoxical it is, the greater is the inflation which it produces.

"I certainly do not recommend that the subjects to which I allude should be withheld altogether from the examination of young men at college; but merely that, as they have no tendency to check the loose and careless manner of thinking which is natural to youth, or to beget habits of close and accurate reasoning, they should be postponed until the intellectual character is somewhat formed and decided. The knowledge which is either lost or gained by the ordinary method of study, is, indeed, comparatively speaking, of little moment; but the habits of thinking, the taste and predilections which are thus almost unavoidably formed, are matters of the very utmost consequence. Speculative opinions, which have no relation to objects of sense, and are incapable of being determined by an appeal to first principles, naturally degenerate either into a wild eccentricity of judgment, or into a deep and settled scepticism relative to the decisions of the human understanding at large. When the mind is once let loose in pursuit of the airy doctrines of pneumatology and moral science, it cannot afterwards submit to be hampered by the closeness of mathematical reasoning, and to ascend step by step the difficult path which leads to strict demonstration. It happens accordingly, that the greater number of the students at Edinburgh and Glasgow neglect mathematics and all the noble sciences which are founded upon them, to such a degree, that, in the natural philosophy classes of both colleges, there are not more than eight or ten young men in a session who can accompany the professor through all the stages of an elementary problem in mechanics or astronomy. In fact, mathematical studies are held in complete contempt by the silly boys whose minds have been seduced and depraved by speculation;—the consequence of which is, that at both seminaries, Euclid is made to give place to essays on moral evidence and theories of virtue, and the *Principia* of Newton are postponed to the fanciful notions of Berkeley and Hume. Thinking on such subjects is pleasant, because every one may think as he chooses, and without any effort;—and when the judgment is tired, imagination takes the reins.

"To prevent or correct this loose and unphilosophical cast of mind, nothing could be better devised than the system of academical study at Aberdeen; which gives a decided preference to mathematical inquiry during the second and third years of attendance, and postpones logic and ethics until the concluding session of the course. Natural history is probably misplaced in their curriculum; as it would require more time to know it thoroughly than can be spared at so early a stage of the pupil's progress; and a smattering of mineralogy, like all other smatterings, will do more harm than good to boys at a humanity class. In all other respects, however, the order and connection which are established among the several departments of philosophy, prove very convincingly, that Dr. Gerard and his colleagues consulted, in their *Plan of Education*, not only the natural relation and dependance which subsists among the various branches of science, but also the best method of disciplining and invigorating the minds of the students.



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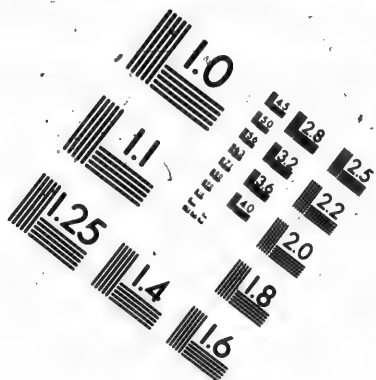
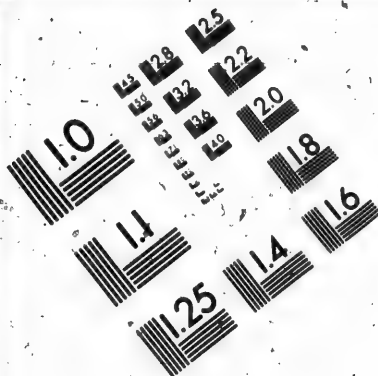
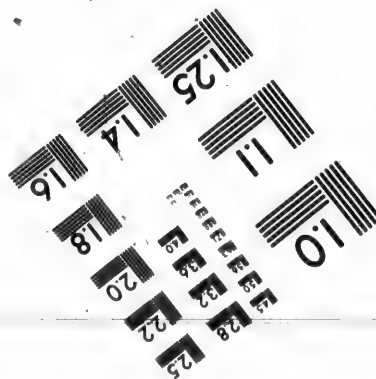
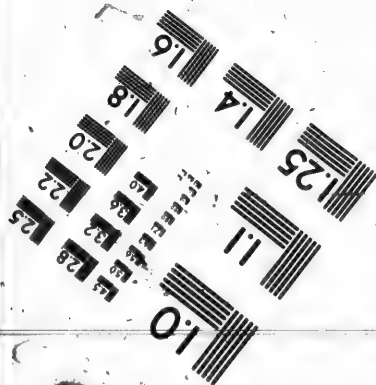
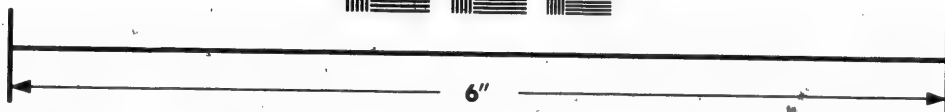
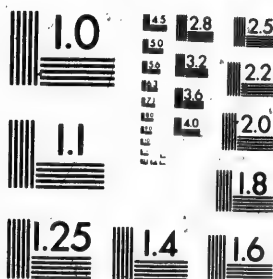


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"It is in the arrangement, too, more than in any thing else, that the system of Aberdeen differs from those of the other universities, for the subjects of study in all are very much the same. But, in a course of preparatory education, of which the chief object is to cultivate the mental powers and to inspire a love and relish for the pursuits of science, arrangement is a point of the greatest importance; for that which comes first in the order of study will probably determine the line of future inquiry, and give a character to all the subsequent operations of taste and judgment. In fact, this is proved to be the case both at Edinburgh and Glasgow, where the favourite exercises are those of metaphysics and morals; at Cambridge, where the students are addicted to mathematics; and at Oxford, where they excel in ancient literature.

X "Now, as the greatest desideratum in youthful minds is close and accurate thinking,—a strict regard to first truths and the laws of evidence,—mathematical knowledge should take the lead in every course of study. Speculations on moral Liberty and the moral Sense, will come in to better purpose afterwards, when the student has become a little acquainted with the workings of his own mind, and been accustomed to reflect on the motives which carry him to action. Indeed, the nature of things seems to require, that the study of our intellectual and active powers should be delayed, until we have had considerable practice in judging and reasoning; for as reflection upon the operations of our own minds is the only medium through which we can acquire any knowledge of thought and feeling, it is necessary that we should have a stock of ideas and sensations, upon which to exercise that faculty, before we proceed to trace the laws and properties of thought and feeling in general. We perform, it is true, in early life all the acts of mind which constitute the subject matter of pneumatology; but it is late before we can acquire distinct notions of them, or can easily and readily make them the object of our contemplation.

"Even in this point of view, then, the Aberdeen system is better than those of St Andrew's, Glasgow, and Edinburgh. It is more skillfully accommodated to the natural openings of the human mind; and to the dependency and connection of the sciences. It is more consentaneous in short, to the Baconian philosophy; and it is not easy to discover upon what ground the universities of Edinburgh and Glasgow retained the order of teaching which had been acted upon by the scholastics, after having exploded the systems themselves which those celebrated persons taught. When logic was regarded as the organon of knowledge,—the instrument by which the sciences were to be learned,—it was reasonable to begin the academical course with the study of it; but now, when it is considered merely as the natural history of the human intellect, the review and explanation of its operations, it ought not assuredly to hold the same place."

NOTE F.

During Session 1846 and 47 a systematic scheme of academical study was prepared and submitted by me to the acting committee of Knox's College, accompanied with the subjoined expository statement, which I now publish, as an evidence of the uniformity and consistency of my principles and practice, in regard to the constitution and conduct of our system of academical education, and as furnishing an answer to Dr. Burns' complaint of the lack or deficiency of preparatory training. The original scheme, to which reference is made in this exposition, is in no respect essentially different from the new edition, corrected and revised, which I have given in Note G.

That my readers may be enabled to sympathize with the warmth and earnestness, and—as it may seem to those unacquainted with the incidents of our academical history, to which allusion is pointedly made throughout the whole of

the document—with the vehemence of the expostulatory, and even oburgatory strain of my exposition, I shall briefly narrate the circumstances and facts which appeared to me to warrant some freedom, and even to justify some severity of animadversion.

At the commencement of 1845-46—immediately after Dr. Burns' instalment as Professor of Theology—a number of students, amounting, as I believe, to not less than one half of the whole Theological class of that season, were prematurely hurried out of the preparatory departments, classical, literary, and philosophical—and some of them, in spite of their own very earnest reclamations, by a sort of academical impressment, were, in a manner, constrained to embark in the study of Biblical Criticism, while they were yet struggling with all the difficulties which lie at the threshold of the learned languages, and in the simultaneous study of systematic theology, without even the possibility of any previous and sufficient initiation in the elements of philosophy, and with the entire omission of a preliminary and fundamental branch of theology, viz: *the Christian Evidences*. Our College was opened for the first time, in the beginning of November, 1844, under the Rev. Mr. King, who was appointed to take charge of the Theological department, the preparatory, or Classical and Philosophical, remaining vacant until my arrival in Toronto in the end of the month. During the ensuing summer I was withdrawn, by the appointment of the Synod, to Montreal, for fully three months, by unforeseen circumstances, and it may easily be conceived, with what inadequate preparation the greater part of the students must have next season entered the classes of Systematic Theology and Biblical Criticism. In these circumstances, I confess that I have not been able to repress my feelings of astonishment, not to say indignation, at the charge iterated and reiterated by Dr. Burns, against the College Committee, of something worse than negligence in regard to the preparatory department,—with the perfect knowledge, all the while, that he is himself chargeable with the whole blame of that deficiency; and I would take leave thus publicly, to remind Dr. Burns, that in opposition to the urgent remonstrances jointly of Mr. Rintoul and myself, as well as the reclamations of several of the students, did he persist to drag them into his class, and preclude, thereby, the very possibility of that preparation for which we had contended, and for neglect of which we are now publicly arraigned, as members of the College committee. With the consciousness of all this, what inconsistency and almost infatuation does it not imply, on the part of Dr. Burns, to have ventured to pen and print such a paragraph as the following:—

"When in October, 1844, I received the appointment from the Synod, to be the Professor of Theology, and to have the charge of training the young men for the Holy Ministry, I undertook the office under the impression that it comprehended the right and obligation to see that the preliminary, as distinct from what is properly Theological, was adapted to the end in view. The young men I was led to consider as all students in Theology—that is, 'under training for the Holy Ministry'—and this is the plain explanation of the fact, that as I saw or thought I saw a deficiency, which neither the learning nor the assiduity of the Professor of Science and Literature appeared to me likely to supply, I set myself in some temporary way to make up the deficiency. With this view, besides personal examinations, I prepared and delivered to the students, in November and December,

1845, about twenty lectures on the Philosophy of the Mind, and the nature of Mental Discipline; the Baconian method of Induction, with its relations to Theological study; the Theories of Morals; and the errors of Brown's moral system, in reference to the scriptural doctrine of rewards."

All this is answered by the simple statement of the fact, that Dr. B. would insist on having enrolled in the Divinity class, students who had not yet gone through the preparatory classes, nor had time and means to be adequately initiated in classical or philosophical learning—and this in the face of *their own and our earnest remonstrances*.

How strange and well nigh ridiculous is it, to find in the printed letter the Dr. representing himself as having been struggling now for more than two years to give greater efficiency to a department which he had annihilated at one blow, turning a deaf ear to all the united remonstrances of his colleagues and of the students. He more than insinuates that the other members of the College committee, and that merely out of a false delicacy to the gentleman who holds the Chair of Mental and Moral Philosophy, or in one word, who is charged with the whole responsibility of the department of preparatory training, have been with a sort of blind perversity, resisting measures essential (as it appears to Dr. B.) to the best interests of the College. "My want of success, hitherto, has led me," he remarks in his printed letter, "to make a last effort in this more formal way, that the demands of conscience and of duty may be satisfied." Highly as I appreciate the services which Dr. Burns has rendered to the College and to the Church, it is impossible for me any longer to tolerate the wrong done to the College Committee, to the Students—and more than all others—to myself, by the reiteration of these very serious charges of negligence and obstinate resistance to necessary reforms—charges which, in the printed letter, have assumed the form of a direct indictment, and been duly submitted to the proper tribunal, so that silence, on my part especially, would be tantamount to a confession of the truth of the imputation.

That I may not be thought unjust to the real merits and services of Dr. Burns, or rash and forward in the publishing these animadversions, I beg to render to him my sincere tribute of admiration and gratitude for the Library, which, by his own unaided and most praiseworthy exertions he has collected, and which will associate his name most honorably with the history of our College; nor can I forget that he came forward at a very early period to patronise our infant Church in British North America, and that to his individual and indefatigable zeal and activity, we are pre-eminently indebted for the extension and prosperity of our Church in these colonies. With such impressions of our obligations to Dr. Burns, for many and various services rendered to our College and to our Church in this land, I would have gladly suppressed these statements and strictures, had not Dr. B., by an open and violent attack at the last meeting of our Synod, upon my colleagues and myself, imposed the painful necessity of putting forth this defensive statement, which nothing less than the duty of *self-vindication* would have warranted me to do, in consistency with my deep sense of gratitude to so eminent a Benefactor, who, I am ready to avow, has earned the best title not only to our respect, but even to our largest possible indulgence.

Exposition of Mr. Ewson's Scheme of Academical Studies, submitted to the College Committee during Session 1846-47.

All art, in its mature state, in its most perfect form, is built upon science, or rather, it is science reduced to practice—applied to the purposes of human life and action. It is the practical application of rules and principles, deduced from a knowledge of the laws of nature, or, of the theory of the subject of the art—adapting the means, upon enlightened views, to this end.

Education, the noblest of the arts, is the one, which should be instituted and conducted, with the most rigid regard to sound principles, deduced from the constitution of man, and the practical ends, for which it is designed to prepare its subject.

All the sciences are constituted of two parts, the first, theoretical or speculative,—the second, practical,—the latter always grounded upon the former, and more or less perfect, in proportion to its conformity to the laws and principles which are involved and expounded in the theoretic or fundamental branch of the subject. It may be laid down, therefore, as the first and most essential canon of the art of education, that the theory of the science, shall precede and pave the way for the practical department. Would you form a good linguist, you must begin by laying the foundation in an accurate and complete knowledge, of the principles of grammar. Would you make your scholar a proficient in astronomy, or mechanics, or optics, you must train him to a mastery of the mathematics; and you may confidently predict, that his attainments in the former, will be very exactly measured, by his progress in the latter. Would you form an accomplished logician, an eminently excellent thinker or reasoner, be assured, that the first and chief requisite, for the end, is an intimate knowledge of the physiology of the mind, of the relations, laws, and workings of the mental faculties. And, just as an entire mastery of the first book of Euclid, will do more in contributing to form a geometer, worthy of the name, than all the empirical teaching and mechanical working of problems, so a careful, and thorough analysis of the mind, will certainly lay a solid foundation of a sound and effective logic. So important is this principle, that I hesitate not to say, that all practical training, before this foundation is laid, before this *propaedeutic* is accomplished, is a mistake, a misapplication of time, and a perversion of the educational art. I would confidently predict that,—of two youths—one of whom, should first be thoroughly indoctrinated in the theory of the mental constitution, before he is allowed to meddle with practical exercises or applications, and the other, is set to the performance of exercises, in the application of the principles of the science, the latter will, at no time, gain any real, or almost apparent advantage over the former, while in the long run, he will be immeasurably outstripped in the race of education. Would you form an accomplished divine, then will it be necessary that you make provision in the work of his education, for grounding him effectively in the knowledge of all the branches of science, literature, and philosophy, which will fit him for his true and proper work,—the enlightened and faithful interpretation of the word of God,—the mind of the Spirit.

In some arts and professions, an empirical knowledge and skill will be enough,

in certain circumstances, to fit a man to discharge his ordinary functions, without detriment to the cause. Yet, even in these cases, there will arise emergencies, in which his deficiency will be exposed, and he will incur reproach to his character, and loss and damage to his interests. In all cases it will preclude even the possibility of rising to the highest eminence and usefulness. This cannot be reached by any who have not mastered the science and studied the theory of the art—on which all its rules and processes are, and must be founded. And there are not a few, even of our secular professions or arts, in which nothing less should be accepted or sustained, at least in our day, as a sufficient qualification for their exercise, than an intimate knowledge of their theoretic principles, and such a proficiency, as will be a pledge of ability, sufficient for the discharge of their appropriate functions. And if there be many merely secular professions, of which it may be confidently affirmed, that there should not be admitted any relaxation in the practical enforcement of this canon of Education, surely, it will be universally allowed, that the work of the Gospel Ministry, least of all, can dispense with it.

Let us enquire, then, what are the essential requisites, so far as human training is concerned, which should be universally demanded, as the condition of admission into the Gospel Ministry.

The first and most essential, without all question, is that which enables the student to come, with due preparation and advantage, to the original fountain of the word of God, in the language, in which it was dictated by the Spirit, through the mouths of the prophets and apostles. It ought assuredly to be a general rule, from which exceptions should be rarely allowed, and those only upon the strongest grounds of necessity or expediency, that no man, in this day at least, is worthy of fit to be called to the office of a public teacher of Divine Truth, much less to be accredited by the seal and stamp of the Church, who lacks this first and chiefest qualification.

This, of itself, without any other qualification, if it could possibly be found apart from other qualifications, literary and scientific, will avail to make even an able Minister of the Word. All other qualifications,—when this is lacking altogether, or greatly deficient,—are from the purpose. Without this, dogmatic theology is left, in a great measure, to grope in the dark. It is without light or eyes to discern, and without any sufficient tests or *criteria* to prove and verify the truth of doctrines, the soundness of views and principles, all which depend upon their conformity to the mind of the Spirit—to the pure standard of the written Word, as it stands in the original record. In every Theological School the great aim should be to make the most effectual provision for the accomplishment of this chief end; and, if this alone be well and thoroughly accomplished, the result cannot but be most propitious to the interests of the Church, and the furtherance of the soundness and efficiency of the Gospel Ministry. Do this well, and the student will easily do the rest by and for himself.—He will hereby be prepared to read the works of Systematic Theology in the pure light of the unadulterated, undiluted word of God, instead of interpreting the word

of God, according to the *ipse dixit* of some Theological Professor, or of some school, sect, or system, to which, in his ignorance and incapacity—by an immediate recourse to the Law and to the Testimony—of judging for himself, chance and circumstances of time and place, may have attached him. The first and most solemn responsibility, therefore, of those who are charged with the Theological training of the candidates for the christian ministry, is, to make the best and most efficient provision, in their power, for this all-important end. In what way and to what extent may this be done? Are we now, in point of fact, doing justice to this, the Alpha and the Omega of Theological Education—so far at least as human wisdom, and human means and agencies are concerned? Our students, for the most part, have to be initiated and grounded in the mere elements of Latin, Greek and Hebrew, not to say English Grammar. The period of three or four years circumscribes the whole curriculum of their Theological Education.—What, in these circumstances, would an enlightened educationalist prescribe, as the great work of the seminary, as that on which the main stress should be laid? Would it not be to ground the student, with special care and diligence, in the sacred and classical languages? Is it not a real palpable absurdity—a thing truly preposterous—to set down or enrol, as a nominal student, in a class of Biblical criticism or Scripture interpretation, a poor fellow, who is yet struggling with all the school boy perplexities of etymology and syntax; who is barely able to construe a simple sentence in Mair's Introduction, and who is lost at every step in the mazes of Hebrew, Greek and Latin declensions and conjugations, all to be encountered and grappled with at once? Yet such absurdities are daily enacted by erudite Doctors and College Senators, with all the solemn formalities of academical legislation and government! Nor is it only in this department, that heads of Colleges and learned Academicians err so egregiously, to the disparagement of their own reputations, and to the real martyrdom of the misguided and over-laboured students. It is quite notorious that ecclesiastical history and systematic theology are professed to be taught to poor bewildered youths, who could not, for the life of them, point to the place on the map where the council was held which condemned Arius, or John Huss, or decreed that no faith should be kept with heretics,—or are led through all the metaphysical reasonings and thorny controversies of Theology, without even an initiation in the principles of Psychology, or any acquaintance with the elements of Philosophy; making altogether void and unprofitable all the prodigal expenditure of learning and eloquence which are exhibited, like colours to the blind, from the Divinity Chair. Those who are thus outdoing the absurdities of the scholastic Doctors in the dark ages have no right to laugh at the Trivium and Quadrivium!

It is no uncommon thing, in the actual conduct of education, in not a few of our Colleges, to have a learned prelection, delivered *ex cathedra*, on the Greek article, or Hebrew verb, before Students, many of whom would be at a loss to decline the one, or conjugate the other. From such reliques of pristine barbarism is it not high time that our Colleges and Academies should be expurgated? How

many of our Students could at this moment give the most meagre outline of History, Geography, Antiquities, yea, the history of their own church and country not excepted? And how many, that have not been imbued with the slightest tincture of Literature and Philosophy, have been forcibly enrolled, or sometimes dragged, reluctant and reclaiming against the absurd impressment, to listen to lectures, of which they were incapable of comprehending the very subject, and by which it was, in the nature of things impossible, that they could be enlightened or improved? The only effect of such irrational modes of academical rule is to bewilder, perplex, and confound them. Were the express design of this procedure to *mechanise the mind—the man*—to damp all his spirit and energy, and to dull and deaden the intellect and imagination, it is certain that no method could be better adapted, for the end. What would wisdom, what would sound sense dictate, in these circumstances? Just to lay the foundation broadly and effectively, before we attempt to raise the superstructure. If we take care to have the students grounded in the elements of literature, science and philosophy, we shall have done so much to the purpose, for the fulfilment of our design. If we neglect this, we are doing worse than nothing; we are vainly essaying to build without a foundation, and are compelling our students "to make brick without straw."

In the present circumstances of the College, and of education in this country, we should, first of all, take care that our students are prepared, by a reasonable proficiency in Grammar, Languages, Philosophy and general knowledge, to profit by their attendance on the stated lectures of the Theological College. Without such a measure of instruction, on the part of those who are admitted into the College, time and labor will be thrown away, both to the teacher and the scholar; and while no solid advantage can possibly accrue in the deficiency of that preparation, which is requisite to fit them for the appreciation, or even simple apprehension, of the instructions delivered, there will be a growing distraction and disgust, on the part of the teacher and the taught, which must not only be prejudicial, but absolutely fatal to the prosperity, if not to the existence, of the Institution.

With regard to the hasty sketch which I have subjoined, the only thing, I deem important is, the general principle of the proposed arrangement—the simultaneous prosecution of the three great departments of study—literature, science and philosophy—so as to supply the deficiencies that must be expected to exist in the preparatory and auxiliary branches of a theological education. In calling them preparatory and auxiliary, however, it should be remembered that, Biblical criticism consists, *essentially*, in a knowledge of the original languages; and this, in the words of Campbell, "is the first branch of the theoretical part of the study of the—ology, and particularly calculated for the elucidation of our religion; by leading us to the true meaning of the Sacred Volume, its acknowledged source."

Nor is it less obvious, that the spirit and accomplishments, of an enlightened Christian philosopher, are—the *very basis*—and, in fact, I might almost say, to a great extent, the *very superstructure* of theological learning and science.

Christian theology, may be said to be identified with the noblest and highest

philosophy, as it is the greatest glory and highest end of philosophy, to be the handmaid of a Scriptural theology. The reason of uniting and carrying forward *pari passu* each of these grand departments, is founded upon their essential connection and interdependence, no less than on the necessity, under any circumstances, of extending and perfecting the literary acquirements of the students—which will always be found, with the rarest exceptions, to be below the mark—and, as the stream cannot rise higher than the fountain, and as the end cannot be reached without the possession of the means, so the strictly professional department of the education of a divine, cannot be carried on, beyond what the breadth and solidity of the foundation will bear;—in other words, we contribute more essentially and effectually towards the forming of an able and accomplished divine, by effectively doing the work of a literary, classical, and philosophical training, than if, with the inadequate execution of this part, we were to employ the most complete and ample provision of lectures and means, for the purely theological studies. I would further urge, in recommendation of this plan, that it allows the various acquirements of the learner, full time, as we say, *to steep*, in his mind, to strike deep their roots, thereby ensuring their permanent fruitfulness and vitality. It will be found, that the time thus given to the subsidiary and collateral studies, will be like the operations of *MATURING AND FALLOWING*, in the analogous art of agriculture—it will recompense abundantly the expense of time and labour, which it may cost, in the augmentation of the harvest which it prepares, and which it alone can ensure. The plan of extending our care and superintendence beyond the narrow limits of the annual session of the College, prescribing to the students a course of reading in all the departments, and with a view to economise the time and labour, detailing and specifying the most interesting and valuable portions of the books recommended, will be found an excellent expedient, for supplementing the imperfections and cking out the work of each session; while it will afford a useful direction to the private labours of the student, and also give a steadiness and unity to the business of his self-training, which may be of more value and advantage than any communication of instruction from the Chairs of the Professors; for, after all, in the work of education, it is the manner in which the scholar conducts his reading, meditation, and self-discipline, that forms the true criterion and measure of his improvement. I would observe, in conclusion, that there will be much room for the exercise of the best wisdom and judgment of the Heads of the College, or of the Committee of Synod, in so digesting and combining the parts and details of this whole system of theological instruction, as to give each its fitting place and season, thus imparting symmetry and unity to the different stages, and to the different departments of the same stage.

EDUCATIONAL SCHEME.

General Principles on which the Educational System, sketched and exhibited in the following Scheme, has been framed.

The whole course is here supposed to occupy the space of five years, to those who are found proficient in all the preliminary branches of knowledge which are required as the condition of their admission.

To those thus duly qualified, the term of their prescribed curriculum extends to five years, and is divided into the preparatory training, embracing the first two years, and the finishing or perfective training which takes in the remaining three years; in other words, a biennial curriculum of Literature and Philosophy, and a triennial, in which Science—Theological and Biblical—is the chief or prominent subject, but classical and general literature, with science and philosophy, are continued, and made to go hand in hand with the other studies more strictly professional.

When the candidates for admission are found deficient in the requisite measure of intellectual culture and literary attainment, either their admission must be postponed, or the period of their preparatory education prolonged. In many cases it will be found that six years altogether, will be necessary for the completing of their education.

For the sake of greater brevity and simplicity in the elucidation of my plan, I shall premise the leading principles by which I have been guided in framing it.

I. The first, and in my apprehension, the most essential principle of all, is the continuity of the course, and the simultaneous prosecution of all the great departments, Literary, Philosophical and Theological,—so as to lead the student onward in a judiciously graduated scale of progression, in all the co-ordinate and essentially connected branches; remembering that the growth of the mind is like that of the body, and that there is a certain time necessary for the due and healthy expansion and invigoration of the mental powers and capabilities—and by natural and necessary consequence—for the work of intellectual culture, and the acquisition of knowledge, as the food and nourishment of the mind.

As there is a certain and early stage of life, in which the bodily constitution is slowly and insensibly formed to a sound, healthy, vigorous habit of life and activity, by suitable bodily exercises and training, so nature indicates and defines to us a like stage in the course of mental development, in which a certain length of time or order, and succession of suitable exercises and studies are required, that all the faculties may attain their due strength and maturity, and may have their erect work. It is on this ground that I would plead for what I have termed the continuity and perpetuation of all the principal studies, Classical, Mathematical, Physical, Philosophical, subordinating them all to the Theological, and lessening the time and attention allotted to them, as we approach the termination of the whole curriculum. This seems to me necessary, according to the analogy of the

natural world, to allow the seed sown to enjoy the influences of the successive seasons; or the mental faculties to pass through the successive processes of development and increase, that like the constituent organs of the animal and natural frame,—they may grow with each others growth, and strengthen with each others strength. The various subjects of reading, lectures, study, generally require a length of time to steep in the mind,—to take living root—to be concocted—expanded—matured.

II. Intimately connected with this last, is another principle, that of directing and animating the student in the private prosecution of reading and study during the recess, no less than in his working in the college classes during the session. For this purpose, and to maintain unity and simplicity, amidst the manifold variety of branches that must be comprehended in our course, tending to perplex, distract and bewilder, it seems necessary to select and prescribe a limited, at least not an unduly extended field of work, specifying the branches, studies and exercises of each year—session—recess—in a printed programme. Let Class Manuals or Text Books, the best and choicest of the kind be adopted, and be regarded as defining by their contents, the range of our probationary trials of examination, and the minimum degree of knowledge in each department, which will be exacted,—as the indispensable condition of successful competition, and let other standard writers be recommended as subsidiary or supplementary to those, leaving it to the voluntary determination of the students, severally,—how many of such books they shall read, or consult, or—how much of each,—as this must evidently depend upon leisure, abilities, means, zeal, or other circumstances. It is our duty to give them that direction, excitement, enforcement, which may operate equally, uniformly, constantly, upon all,—producing in all the greatest possible amount of mental culture and improvement—and literary and scientific proficiency,—proportioned to the gifts of nature and grace, or the favorable circumstances in which Providence may have placed them; and at the same time defining the very minimum of readings, exercises, acquirements, which will be required to warrant their receiving a passport from stage to stage.

III. The third general principle—by which I should hope, we might be able to give life and energy to the students, and to sustain, as well as quicken and invigorate their application and industry in the work,—is the faithful strictness, without rigor, or any unreasonable severity, with which we conduct those periodical examinations,—those probationary trials,—by which I would deem it most desirable, that they should purchase for themselves, in the words of the Apostle, “a good degree,” and win by merit, every step of progressive advancement from the commencement to the close. This influence would operate upon them habitually,—would not work them into any feverish excitement—would tend powerfully to establish right, healthy habits—intellectual and literary; in my apprehension, none of them more to be prized, than that of reading and studying under the vivid and unintermitted sense of responsibility,—feeling that the knowledge which they seek must be engrafted into their minds, and be in them and abide with them, throughout—not only one session, but must stand them in good stead, in all the

periodical and reiterated examinations which are awaiting them. It is thus that I would enforce the necessity of a sustained and unflagging diligence and perseverance, and would make our direction nearly as effective as our immediate and personal inspection, and render the recess of college as busy and as fruitful as our most strenuously working sessions have hitherto been.

IV. A programme of the course and an outline of his prelections by each Professor, with a series of printed queries, and references to the sources of information accessible to the student, would, in my judgment, be of incalculable benefit—would contribute to give a wonderful facility and furtherance to the work—and at the same time would secure unity and systematic order and precision—an object of the highest importance.

In this programme it would be proper to define the Text Books, which ought to be always the best and most approved, and of such a reasonable number, extent, and cost, as to enable all the students to obtain them, and to master their contents. It should be our aim, under each branch, to make out distinctly and clearly, the minimum of attainment which will be satisfactory, and at the same time to give the greatest scope and best direction to those of our students who possess ability, zeal, leisure, and means for more extensive and profound acquirements, to make the most of their advantages. Besides the Text Books, therefore, there should be others prescribed for reading and study, or as subjects of oral or written examinations; also a more extended list of books to be consulted or perused as a voluntary work, a labour of *free will and love*, and this with a special view to economy, and render most productive of benefit and improvement, the time and studies of the learner.

V. But of all methods of accomplishing the legitimate and valuable ends of a sound and enlightened education, and providing the most effectual antidote to the danger of contracting the evil habits—to which all students, more or less, are prone—of loose, desultory, superficial reading and thinking, and of incoherent and rambling excursions out of the course of well-digested and systematized study,—none is comparable to that indicated by Stewart, viz: the habit of committing to writing, in a systematic form, all our acquired knowledge, whether it be the fruit of reading or of our own original reflection, and doing this with all the order, precision, and regularity of a merchant, whose books exhibit a clear and complete system of all his transactions in business, with periodical reviews and balancings, in order to estimate his losses and gains, and thereby to ascertain the progress or decline of his trade and fortune. It is easy to see how effectual such a method of study would be for ensuring the best direction of the work, the most powerful enforcement of habits of order and application, and the most satisfactory testing and ascertaining of the actual proficiency of the student at every stage of his educational career. By exacting in this manner a systematic written record of the net product, so to speak, of his reading and thinking *conjointly*—embodying with the student's own original reflections and annotations, abstracts and summaries of books read, and of the systems of scientific knowledge essentially connected with his academical course, and forming a part of his probationary examination—

A more foundation would be laid of solid learning, and—which is infinitely more important—of *habits of sound thinking*. This, it is evident, is the only way in which the mind can be imbued with a genuine love of truth, and, as the natural fruit, a pure taste for science and letters, combining with the taste and the spirit of literature, the most enlightened means and methods of its cultivation. It cannot be doubted that there is an intimate and vital sympathy subsisting between our intellectual and our moral and spiritual being, so that the right culture and discipline of the former cannot fail to be highly propitious to the fullest expansion and most perfect working of the latter.

VI. It is to be understood that every Session shall be opened by a general review and inventory of past studies and acquirements, and especially by a strict and searching examination on the subjects of reading, study, and prescribed exercises of the Session and recess immediately preceding,—the result of this examination being made the condition and criterion of the status of the Student during that Session. A similar review and recapitulatory examination shall be understood to form the business of two or three weeks at the close of the annual course, and honorary prizes to be allotted to those who shall be found most distinguished by proficiency.

At the final close of his Classical, Literary, Philosophical, and Theological training, it should be a standing law of our Church, that in no case shall any one receive a license to preach the gospel, who, after a strict and searching examination, shall not be found so well grounded at least in the grammatical elements of Latin, Greek, and Hebrew; as to capacitate him to become in due time, with proper industry, proficient in these languages, and to attain that critical acquaintance with the Divine Word, which, in this enlightened age, is indispensable to the due qualification of a Minister of the Gospel. In the department of Philosophy and Science, the very minimum of the qualifications required, should be a perfect mastery of the principles of the Baconian method, and of the philosophy of Locke and of the Scottish School, as laid down in Reid and Abercrombie. To this I would add, an intimate knowledge of the great works of Butler, his Analogy and his Sermons. Such a measure of attainment in Languages, Literature, and Philosophy, as I have proposed as the minimum of the Church's requirements for all Students of Divinity under her auspices, would afford sufficient security that our Ministers should not at least fall below the standard of the age, and would necessarily lead to a higher tone of professional qualification. This demands the most anxious and careful attention of the Church,—as the real efficiency of our Theological Institute, next to the moral and spiritual training of the Students,—will be determined by the strictness with which this minimum amount of qualification is practically enforced. As nothing can be more reasonable or moderate than the standard here proposed, it would be worse than weakness and dereliction of duty on the part of our College and our Church,—it would be a cruel wrong done to the candidates for license, if they were permitted to go forth into the field without this medium of learning, sacred and secular.

GENERAL SUBJECT MATTER OF THE EDUCATIONAL COURSE.

The subject matter of the entire Educational course may be distributed into four grand departments; the *First*, which may be denominated the department of Literature, would embrace Grammar, Language, Classical and General Literature. *Second*, Science, mathematical and physical. Whether taught within or without the walls of our College, this must be held to be an essential and integral part of our course. *Third*, Philosophy, mental, political, moral,—including of course, Logic, Rhetoric, Ethics or Morals,—together with Natural Theology as its practical branches. The *Fourth* division of our general-course, would embrace Theology in all its extent, in all its great departments. In the preparatory course, corresponding to this last, would be what we may call Sacred Literature, that preparatory and elementary instruction and training in the Vernacular Scriptures, Catechisms, Confession of Faith, which ought to precede and prepare the way for the first theological class.

SYSTEMATIC ARRANGEMENT AND DISTRIBUTION OF STUDIES, ADAPTED TO THE QUINQUENNIAL CURRICULUM OF KNOX'S COLLEGE, TORONTO.

FIRST PART, OR PREPARATORY BIENNIAL COURSE.

Beginning, then, with the preparatory Biennial course, in this fourfold division of the whole system: 1st, Classical or Literary; 2d, Mathematical and Physical Science; 3d, Philosophical; 4th, Sacred or Scriptural,—we have for the

FIRST YEAR OF THE PREPARATORY BIENNIAL COURSE,

I. *English and Classical Literature.*

At this first stage, under this first head of studies, the chief business would necessarily be a thorough review or revival of English, Latin, Greek, Grammar, with practical exercises in double translation, and practice of composition in these languages severally, to be thenceforth carried on throughout all the subsequent stages.—Manuals for this class, such as Murray's larger Grammar with Exercises, Mair's Introduction, Dunbar's or Sandford's Greek Exercises.—Classical reading this year: in *Latin*,—Cæsar, Ovid, Phædrus, Cornelius Nepos—certain portions being selected for the class, and others prescribed, to be read and studied privately as subjects for the annual examination. And let it be recommended—as a part of the voluntary studies and readings during recesses and vacations, or at leisure hours—to those who will and can—to read these authors, or as much of them as possible in order, recording their annotations and general remarks, in a commonplace book. In *Greek*,—Xenophon, (Anabasis and Cyropædia) Herodotus, Lucian's Dialogues, Homer,—parts or portions of these to be read in the College,—others

to be prescribed for private reading. Voluntary readings, as in the Latin, to be recommended, and their measure determined for himself by the student. It might be advisable, for the sake of economy, and also of moral purity, to use in the College such selections from the classical writers, in the order of easiness or difficulty, as we have exemplified in Dalzel's *Collectanea Græca Majora*. A *Collectanea Latina* on the same plan, would be desirable.* Nor ought we to neglect, at this stage, the English Classics, such as Milton, Thompson, Cowper, Addison's *Spectator*, Robertson's *Historical Works*, in whole or in part, on the same principle as described above, in the management of the classical studies. These, if not read before entrance into the College, would be a sort of liberal relaxation and amusement of bye hours. As collateral studies, the Student should have his attention directed to the best manuals of Greek and Roman Antiquities, or be made to write summaries or abstracts of Potter, Adams; whole or partial.—Elements of Prosody, Mythology, Ancient Geography, and Chronology.—The Philosophy of Grammar, and so much of Rhetoric or Criticism as may be taught at this period, in connexion with readings and exercises in all the three languages.

II. Mathematical and Physical Science.

As these studies must needs be extramural, I have no occasion to take them into present consideration, but simply to remark, that they must form a part of our periodical examinations, and a due proficiency therein, be recommended and enforced. Special care should be taken in the direction of these studies, to give the learner a thorough insight into the inductive Logic and the method of Mathematical Reasoning, or the Logic of the Mathematical Sciences.

III. Philosophical Department.

Manuals.—Abercrombie's *Intellectual and Moral Science*, and Reid's *Inquiry*.—Reid's *Essays*, or rather select portions of them to be judiciously associated with the corresponding parts of the *Manuals*,—each of these *Manuals* to be accompanied with a series of queries, pointing the student to the leading views and doctrines. The best method, and the most suitable kind of discipline and exercises in this class, have been fully explained in the *Statement*.—A synopsis of History, sacred and profane, according to the views therein expressed, with a directory for the Student's guidance, in his private reading and study of this very essential branch.—Paley's or DeLolme's view of the British Constitution, together with Tytler's *Elements of History*, would be the best *Manuals* for this class, forming a suitable introduction to Political Philosophy.

As the Student, in conformity with the general principles which we have premised, should be required to prosecute Historical Studies through all the stages of his subsequent course, extending and perfecting his knowledge as he advances, in the prospect of a searching examination at the close of his College curriculum,

* A *Collectanea Sacra*, made up of judicious selections from the best Greek and Latin Fathers of the ancient Christian Church—for the use of our Students—would be extremely desirable.

in which the whole system of his academical studies shall be brought under review, it will be proper to furnish him in the outset with a printed programme, directing him to the best sources of information, and containing systematic references to the most interesting portions of our best philosophical historians, so that he may extract, as it were, the pith and marrow of them.

IV. *Scriptural Studies.*

Bible History, Geography and Chronology; Edward's History of Redemption, Paterson's Church History, Paterson's Shorter Catechism; and the Confession of Faith.

SECOND YEAR.—PREPARATORY BIENNIAL COURSE.

Revision of the work of the first year, in a close and comprehensive recapitulatory examination:—

1. *English, Classical, and General Literature.*

Select portions of English Classics to be read and criticised; others to be prescribed or recommended as private studies, according to the principle already explained. Some select specimens of the beauties of our Dramatists and other Poets, of our Orators, Philosophers, Divines.—Rhetoric and Elements of Criticism continued.

Latin authors to be read at this stage, and on the same principle—Livy, Virgil, Cicero, Horace—or rather selections from these—requiring of the Student written abstracts or summaries of the story, with criticisms or annotations illustrative of manners, arts, geography, law, or religion. A general critical view of the works as a whole, of Cicero, Virgil, Horace, Livy, ought always to be given by the Professor, as each author comes to be read in the class.

Greek authors to be read—Homer continued—and—if possible,—read in whole or in great part before leaving College.—Of the others, the readings voluntary and prescriptive, as already explained.—With Xenophon's Anabasis and Cyropædia, may now be combined his Memorabilia, Tabula Cebetis, Thucydides, and Pindar.

The ground that is thus newly broken every session in the College classes, it is to be understood by the Student, shall continue to be cultivated by his private labours, both during the session, and more especially during the recess; and every aid, encouragement, and facility should be afforded for this purpose, so as to form a taste and habit of Classical reading. This seems the proper time to begin the study of Hebrew,—merely taking up this year the simple elements of the Grammar.* In connection with the preceding studies,—as collateral and subsidiary,—Greek and Roman Antiquities, Jahn's Hebrew Archaeology, Ancient Chronology and Geography, with Prosody and Mythology continued.—

* Since the above was written, I find the same recommendation given by the Committee of the Free Church College, Edinburgh.

II. Mathematical and Physical Sciences.

To be dealt with, as in the first year of the course.

III. Philosophical Department.

Review of the work of the last year. Reid's *Essays*, with Stewart's *Elements*, and his *Philosophy of the Active and Moral Powers*, including the practical as well as the speculative parts of the science: *i. e.* *Logic*, *Practical Ethics*, and *Natural Theology*.—*Essays*, *Abstracts*, *Epitomes*, to be the exercises in the senior Philosophy class; *Conversations*, written and oral answers to *Queries*, in the first or junior class. The general method to be pursued in regard to books, readings, exercises, during the recess,—Montesquieu's *Spirit of Laws*; Burke's *French Revolution*; De Toqueville; Smith's *Wealth of Nations*,—as collateral studies in the Philosophy of History.

IV. Scriptural and Sacred Studies.

A written abstract or outline of the whole Bible, with a short analysis of each Book, so as to be able to state readily from memory the subject of each Book, and of the principal sections or divisions severally, with a view to obtaining a facility of reference to any narrative, incident, doctrine, or precept, and a ready command of the whole subject matter.—*Confession of Faith and Larger Catechism* to be finally and accurately revised.

The whole Preparatory Course to be closed with a general examination.

SECOND PART, OR TRIENNIAL THEOLOGICAL COURSE.

FIRST YEAR OF THE TRIENNIAL THEOLOGICAL CURRICULUM, AND THIRD OF THE WHOLE COURSE.

I. Theology Proper.

1. Review, and continuation of *Natural Theology*, Text Books, Butler's *Analogy*, and Paley's *Natural Theology*. Books for Voluntary Reading and Study,—Brougham, Rae, Derham, Bridgewater Treatises.

2. *Christian Evidences*,—Text Books, Paley's *Evidences*, Horn Pauline, and Leslie's *Short Method with Deists*. On *Miracles*,—Campbell. On *Prophecy*,—Keith, Davidson, Newton. For Voluntary Reading,—Bishop Wilson, MacKnight, Lardner, Gerard.

The Professor who prelects in this department, should give the Students a brief outline view of the principal works on the *Evidences*, and their peculiar merits.

This year, during the session and recess, the student, preparatory to a full course of *Ecclesiastical History*, forming a part of the stated course of the second Theological year, should be well grounded in an outline view of that branch, using Paterson's *Catechism*, Waddington and D'Aubigne's *Reformation*, as his

guides; and the very best preparation for this second session would be, to write during the recess, an abstract or outline of the History of the Christian Church,—ancient, mediæval and modern.

Co-ordinate with the Theological Course, Biblical Criticism, should be commenced this session, and continued through the remainder of the curriculum. The Students,—already initiated in the Elements of Hebrew, and in some degrees, proficient in Greek, as an essential part of their preparatory training,—are now to be finished in the study of Hebrew Grammar. They might find advantage in combining with it the study of Moses Stuart's Grammar, of the Greek New Testament—with such suitable practical exercises as the Professor may prescribe.—Easier portions of the Hebrew Bible read, and the pupils exercised in the Grammatical Elements of that language. Along with this,—Critical reading of the Septuagint, Greek New Testament, Vulgate, Latin New Testaments, (Beza's and Castalio's,)—Critical Exercises, oral and written.—Text Book,—Horne's Introduction.

II. *Classical Studies.*

Classical Studies now can only be expected to occupy a subordinate place; the main studies being Theology Proper, and Oriental Languages and Literature. The Latin Classics would now be Cicero de Finibus,—Moribus,—Tacitus,—Juvenal—Lucan. Greek,—Plato, Aristotle, Longinus, or rather selections from them, with so much, as may be meet, prescribed, or recommended for the recess. A general outline view of Ancient Literature, should be made the subject of prelections, from the Classical Chair.

III. *Philosophy.*

Brown's Lectures, Smith's Moral Sentiments, Butler, Locke, Edwards on the Will, Cadworth, Hume's Philosophical, and especially his Sceptical Writings.—These are to be considered by Studies, the subject of previous preparation during the recess,—the Professor of Philosophy selecting such parts or portions of each, as at this stage may be most suitable for the Students, and most fitted to perfect their attainments in this department.

IV. *Physical Science.*

Now would be the time and place for Physio-Theology, or a view of the Material Universe, its Laws and Phenomena, calculated to fortify the mind against all the forms of infidelity connected with this department of science, and to make physical philosophy the handmaid of faith.

FOURTH YEAR OF THE GENERAL COURSE, AND SECOND OF THE THEOLOGICAL CURRICULUM.

GENERAL RECAPITULATION.

I. *Systematic Theology.*

Calvin's Institutes, Hill's Lectures, Calvin to be read in the original Latin. Collateral and Subsidiary readings during the session or recess, voluntary or prescribed.—Dick's and Dwight's Systems, Witsius. In Ecclesiastical History.—Mosheim, Neander, Milner, Campbell, Gibbon's Infidelity with refutations.

Oriental and Biblical Literature,—in conjunction with the Hebrew, the study of the Chaldee, Syriac, Arabic, Persian,—by such as have a genius for languages.—Biblical Criticism, Infidel Criticism, and German Neology.

II. *Classical Studies.*

Plato's and Cicero's Philosophical Writings, Seneca and Epictetus. Commencement of the Study of the Fathers, Greek and Latin,—Augustine, Lactantius, Chrysostom, Origen, Basil. These Fathers, together, with some of the great modern divines, who write in Latin, might be more or less introduced to the notice of our Students, and the door opened to the study of them. A general view of patristic literature, and some directions to guide the Student to what is most profitable in this wide field of learning.

III. *Philosophical Department.*

Cadworth, Clarke, Bacon's Essays, and choicest portions of his philosophical writings; General Review, Historical and Critical, of Philosophy, ancient and modern.

IV. *Mathematical and Physical Science.*

This would be the time to wind up this department by a review of the various hypotheses and systems which bear a malign aspect to religion and morals. A general history of the rise, progress, and revolutions of Science—of its influence on man and society—on civilization and christianity.

General review of these Studies at the close of the Session, and prescriptions of readings and exercises for the recess, with printed directions.

FIFTH YEAR OF THE GENERAL COURSE, AND THIRD OF THE THEOLOGICAL TRIENNIAL CURRICULUM.

I. *Theology.*

1. A Review of the Evidences—of Ecclesiastical History—of Systematic Theology—before proceeding to the main subject—the Pastoral Care and Ecclesiastical Polity.

2. The system of Missions. A general closing view of the state and prospects of the Christian Church,—all that is promising and all that is perilous or threatening in the aspects of Providence.

The great work of this season should be, exercising the Students in the practical application of the learning which they have acquired,—Pulpit Exercises,—Rules of Delivery,—Exegesis.

3. Oriental and Biblical Studies; Critical Reading and Exegesis of the more dark and difficult parts of the Old Testament; Practical and Testing Exercises, to finish the Student in his critical skill,—concluding with the past history and present state of Biblical and Critical Literature in Britain, Europe, and America,—giving directions for the future prosecution and perfecting of the work.

The whole of the original Text of Scripture should be distributed into several portions, and read with critical exactness, during the Theological Triennial Curriculum.

II. Philosophical Studies.

A general Review and Estimate of the great Schools of Philosophy—ancient and modern—British, French, German. Their influence—social, moral and religious—their state and prospects in Britain, Europe, America, &c.

III. Literary Department.

A strict account should be taken of the Student's private reading. He should be directed to such select portions of the great Divines and pulpit orators of Britain, America, and the Continent of Europe—not excepting the ornaments of the Church of Rome—such as Bossuet, Fenelon, Massillon—and though a layman—Paschal. Reviews, Abstracts and Critical Strictures on the style and the matter of the great masters of Sacred Literature and Eloquence should be given this Session from the Chair, and occasionally exacted from the Students. Their characteristic beauties and blemishes, and the results of good or evil which may be ascribed to their lives and writings, should be pointed out. Books of this description to be recommended to the Students—Hooker, Taylor, Baxter, Barrow, Howe, Owen, Warburton, Hall, Horneley, our own Chalmers, President Edwards.

N. B.—The preceding Notes have reference, not so much to any particular page or passage of the Statement, as to the general drift and tenor of the whole subject or argument; but the following Note, H, is specially referred to, in the concluding part of the Statement, pages 51 and 52, in laying down directions for the conduct of the reading, studies, and exercises of the Students:—

NOTE H.

It would be unfair to publish the very interesting results of an examination of about fifteen of our Students—in relation to their general reading and acquirements,—conducted chiefly by Mr. Gale, at the commencement of last Session, decisively confirming the views submitted in my Statement, relative to the importance—if I may not say, necessity—of an enlightened Directory, pointing out to them the most proper Books to be read, and Studies to be prosecuted at every stage of our course. From this Document, it evidently appears,

that for the want of such direction and superintendence, most of our Students are essentially deficient in one or more of the great departments of Education. Their general acquaintance with English Literature is exceedingly defective; and the Books read by them have not been selected with the best judgment, nor the reading of them disposed and conducted in the way to be most beneficial and productive of fruit. I trust that a thorough investigation of the amount and quality of the reading and study of each Student will be instituted at the opening of every Session, and that a faithful estimate and inventory of defects in each department, will be made; and put on record, as an indispensable requisite, to guide us in the enforcement of our discipline and the complete fulfilment of all the ends of an English, Classical, Philosophical, and Theological Education.

As an apology for the disproportionate length of this Appendix, it may be proper for me to state, that it was not merely for the purpose of self-vindication; or for the confirmation of my own views of the various subjects brought under discussion, that I have collected and embodied the testimonies of the highest authorities and most distinguished masters of the Philosophy of Education; but chiefly to put before the Professors and the Students, what appeared to myself the very best lights to guide both to the attainment of their common end, by the best means.

"Non meus hic sermo est sed quæ præcepit Ofellus."

ERRATA.

- Page 6, 9th line, for "Lork," read "Lord."
 Page 12, 3d line from the bottom, for "theoretical," read "theological."
 Page 32, 4th line from the bottom, for "Dr. Gregory," read "Dr. Gerard."
 Page 59, 10th line from the bottom, for "possess of," read "possessed of."
 Page 66, 12th line from the top, for "Heterodite," read "Heteroclite."
 Page 68, 24th line from the bottom, for "propositions," read "proportions."
 Page 77, 11th line from the top, for "ectures," read "lectures."
 Page 78, 22d line from the bottom, for "internal," read "external."

